

# **California Regional Water Quality Control Board**

San Francisco Bay Region

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The following Dischargers are subject to waste discharge requirements as set forth in this Order, Order No. R2-2006-0026:

**Table 1. Dischargers Information**

Dischargers	Livermore-Amador Valley Water Management Agency (LAVWMA), Dublin San Ramon Services District (DSRSD), and City of Livermore
Name of Facility	LAVWMA Export and Storage Facilities
Facility Address	7176 Johnson Drive Pleasanton, CA 94588 Alameda County

The Discharge by LAVWMA, Dublin San Ramon Services District (DSRSD), and City of Livermore from the discharge points identified below is subject to waste discharge requirements as set forth in this Order:

**Table 2. Discharge Location**

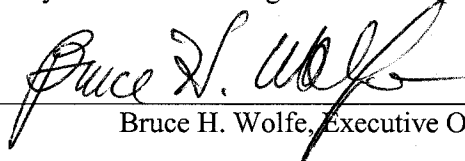
Discharge Point	Effluent Description	Discharge Point Latitude	Discharge Point Longitude	Receiving Water
San Lorenzo Creek Outfall M-002	Intermittent peak wet weather extreme storm event discharge of secondary treated, disinfected, and dechlorinated effluent	37°, 40', 30"N	122°, 09', 14"W	San Lorenzo Creek
Alamo Canal Outfall M-003	Intermittent peak wet weather extreme storm event discharge of secondary treated, disinfected, and dechlorinated effluent	37° 41' 10"N	121° 54' 54"W	Alamo Canal

**Table 3. Administrative Information**

This Order was adopted by the Regional Water Board on:	April 12, 2006
This Order shall become effective on:	June 12, 2006
This Order shall expire on:	June 8, 2011
The U.S. Environmental Protection Agency (U.S. EPA) and the Regional Water Board have classified this discharge as a minor discharge.	
The Dischargers shall file a Report of Waste Discharge in accordance with Title 23, California Code of Regulations, not later than December 8, 2010, which is 180 days in advance of the Order expiration date, as application for issuance of new waste discharge requirements. In case of a discharge to both San Lorenzo Creek and Alamo Canal, the Dischargers shall submit two separate applications one for each outfall.	

IT IS HEREBY ORDERED, that this Order supercedes Order No. 99-023 except for enforcement purposes, and, in order to meet the provisions contained in Division 7 of the California Water Code (CWC) and regulations adopted thereunder, and the provisions of the federal Clean Water Act (CWA) and regulations and guidelines adopted thereunder, the Dischargers shall comply with the requirements in this Order.

I, Bruce H. Wolfe, Executive Officer, do hereby certify that this Order, Order No. R2-2006-0026, with all attachments is a full, true, and correct copy of an Order adopted by the California Regional Water Quality Control Board, San Francisco Bay Region, on April 12, 2006.

  
Bruce H. Wolfe, Executive Officer

# **CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD REGION 2, SAN FRANCISCO BAY REGION**

**ORDER NO. R2-2006-0026**

**NPDES NO. CA0038679**

## **WASTE DISCHARGE REQUIREMENTS FOR THE LIVERMORE-AMADOR VALLEY WATER MANAGEMENT AGENCY (LAVWMA), DUBLIN SAN RAMON SERVICES DISTRICT (DSRSD), AND CITY OF LIVERMORE, LAVWMA EXPORT AND STORAGE FACILITIES INTERMITTENT PEAK WET WEATHER DISCHARGE TO THE SAN LORENZO CREEK, ALAMO CANAL, OR BOTH**

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## I. FACILITY INFORMATION

The following Dischargers are subject to waste discharge requirements as set forth in this Order:

**Table 4. Facility Information**

<b>WDID</b>	2019129001
<b>Dischargers</b>	Livermore-Amador Valley Water Management Agency (LAVWMA), Dublin San Ramon Services District (DSRSD), and City of Livermore
<b>Name of Facility</b>	LAVWMA Export and Storage Facilities
<b>Facility Address</b>	7176 Johnson Drive Pleasanton, CA 94588 Alameda County
<b>Facility Contact, Title and Phone</b>	LAVWMA Contract Operations Manager
<b>Authorized Person to Sign and Submit Reports</b>	LAVWMA Contract Operations Manager
<b>Mailing Address</b>	C/O DSRSD 7051 Dublin Blvd, Dublin CA 94568
<b>Billing Address</b>	Same as mailing address
<b>Type of Facility</b>	Publicly owned treatment works, export, and storage facilities
<b>Major or Minor Facility</b>	Minor
<b>Threat to Water Quality</b>	Category 2 (based on three categories 1, 2, and 3)
<b>Complexity</b>	Category B (based on three categories A, B, and C)
<b>Pretreatment Program</b>	Not Applicable
<b>Reclamation Requirements</b>	Not Applicable
<b>Facility Permitted Flow</b>	Intermittent: San Lorenzo Creek Outfall = 21.5 MGD, Alamo Canal Outfall = 55 MGD
<b>Facility Export Design Flow</b>	41.2 MGD
<b>Watershed</b>	San Lorenzo Creek and Alameda Creek Watersheds
<b>Receiving Water</b>	San Lorenzo Creek and Alamo Canal
<b>Receiving Water Type</b>	Surface Water

## II. FINDINGS

The California Regional Water Quality Control Board, San Francisco Bay Region (hereinafter Regional Water Board), finds:

- A. Background.** Livermore-Amador Valley Water Management Agency (LAVWMA) is currently subject to waste discharge requirements under Order No. 99-023, National Pollutant Discharge Elimination System (NPDES) Permit No. CA0038679. LAVWMA is a Joint Powers Agency; its member agencies include Dublin San Ramon Services District (DSRSD), City of Livermore, and City of Pleasanton. DSRSD and the City of Livermore separately own and operate collection and treatment facilities for domestic, commercial, and industrial wastewater. DSRSD and City of Livermore are currently regulated by NPDES No. CA0037613 and NPDES No. CA0038008, respectively. City of Pleasanton does not own or operate a wastewater treatment plant. DSRSD is responsible for treating the wastewater collected by the City of Pleasanton. LAVWMA, DSRSD, and City of Livermore are hereinafter named as Dischargers. LAVWMA

submitted a Report of Waste Discharge, dated April 27, 2004, and applied for a NPDES permit renewal to discharge, intermittently in case of a 20-year flow event (as explained in Attachment H), up to 21.5 MGD of secondary treated, disinfected, and dechlorinated wastewater to San Lorenzo Creek and flow in excess of a 20-year extreme storm flow event to Alamo Canal. LAVWMA submitted five supplements to the application dated May 3, 2005, May 23, 2005, November 28, 2005, December 13, 2005, and December 20, 2005. The application was deemed complete on December 20, 2005.

**B. Facility Description.** LAVWMA receives secondary treated and disinfected wastewater from the DSRSD and City of Livermore wastewater treatment plants at its facilities before pumping the combined flow to the East Bay Dischargers Authority (EBDA) system. EBDA transports LAVWMA treated wastewater jointly with the treated wastewater from its wastewater treatment member agencies to its Marina Dechlorination station near the San Leandro Marina and thence to its deepwater outfall in Lower San Francisco Bay. During extreme storm events, LAVWMA maintains its maximum export pumping capacity and, together with its member agencies, use their combined storage facilities, including DSRSD 18.9 MG and City of Livermore 15 MG storage ponds to increase in-valley flow equalization capacity as explained below:

- i. LAVWMA discharges up to 41.2 MGD to EBDA's system;
- ii. LAVWMA fills the 18 MG storage reservoirs capacity to 75% full;
- iii. DSRSD begins storage in its 18.9 MG capacity storage pond and Livermore is notified of situation;
- iv. When the LAVWMA 18 MG storage reservoirs are 90% full, DSRSD continues storage at the DSRSD facility and Livermore begins storage in its 15 MG capacity ponds;
- v. LAVWMA, DSRSD, and Livermore fill all storage facilities to 100%;
- vi. LAVWMA continues discharging 41.2 MGD to EBDA's system or at least 19.7 MGD to EBDA's system and at most 21.5 MGD to San Lorenzo Creek (the flow discharged to San Lorenzo Creek is de-chlorinated);
- vii. LAVWMA notifies the Regional Water Board and Alameda County Water District (ACWD) and begins de-chlorination before any discharge to Alamo Canal; and
- viii. LAVWMA stops Alamo Canal discharge after the incoming flows subside to below 41.2 MGD.

These waste discharge requirements are for discharges to San Lorenzo Creek and Alamo Canal. Both San Lorenzo Creek and Alamo Canal are waters of the United States. Attachment B provides a map of the facility's region and its outfall locations. Attachment C provides a schematic of LAVWMA's reservoirs.

**C. Legal Authorities.** This Order is issued pursuant to section 402 of the Federal Clean Water Act (CWA) and implementing regulations adopted by the U.S. Environmental Protection Agency (USEPA) and Chapter 5.5, Division 7 of the California Water Code (CWC). It shall serve as a NPDES permit for point source discharges from this facility to surface waters. This Order also serves as Waste Discharge Requirements (WDRs) pursuant to Article 4, Chapter 4 of the CWC. This Order shall become effective two months after the date of its adoption provided the Regional Administrator, USEPA, has no objection. If the Regional Administrator objects to its issuance, the permit shall not become effective until such objection is withdrawn.

- D. Background and Rationale for Requirements.** The Regional Water Board developed the requirements in this Order based on information submitted as part of the application, through monitoring and reporting programs, and other available environmental information. Attachments A through H are hereby incorporated into this Order and constitute part of the Findings for this Order. Attachment F is the fact sheet, which contains background information and rationale for Order requirements.
- E. California Environmental Quality Act (CEQA).** This action to adopt an NPDES permit is exempt from the provisions of the California Environmental Quality Act (Public Resources Code Section 21100, et seq.) in accordance with Section 13389 of the CWC.
- F. Technology-based Effluent Limitations.** The Code of Federal Regulations (CFR) at 40 CFR Section 122.44(a) requires that permits include applicable technology-based limitations and standards. This Order includes technology-based effluent limitations based on Secondary Treatment Standards at 40 CFR Part 133.
- G. Water Quality-based Effluent Limitations.** Section 122.44(d) of 40 CFR requires that permits include water quality-based effluent limitations (WQBELs) to attain and maintain applicable numeric and narrative water quality criteria to protect the beneficial uses of the receiving water. Since discharge to San Lorenzo Creek or Alamo Canal have yet to occur from this Facility, this permit includes a WQBEL for whole effluent toxicity, but no WQBELs for priority pollutants. However, after a discharge occurs and monitoring data are collected, this permit may be reopened to include additional WQBELs.
- H. Water Quality Control Plan.** The Regional Water Board adopted a Water Quality Control Plan for the San Francisco Bay Basin (hereinafter Basin Plan) on June 21, 1995, and amended this plan on January 2, 2004, and November 16, 2005. This later amendment will be final after approval from the State Board and Office of Administrative Law. The Basin Plan designates beneficial uses, establishes water quality objectives, and contains implementation programs and policies to achieve those objectives for all waters addressed through the plan. The beneficial uses applicable to San Lorenzo Creek and Alamo Canal are listed in Table 5 on the next page. The water flowing in San Lorenzo Creek recharges East Bay Plain groundwater basin and the water flowing in Alamo Canal recharges Livermore Valley groundwater basin. In addition, Alamo Canal is tributary to Arroyo de la Laguna and Arroyo de la Laguna is tributary to Alameda Creek. The water flowing in Arroyo de la Laguna recharges Livermore Valley and Sunol groundwater basins and water flowing in Alameda Creek recharges Sunol, East Bay Plain, and Niles Cone groundwater basins (see the map in the Attachment B). The existing beneficial uses of these groundwater basins are municipal and domestic supply, industrial process water supply, industrial service supply, and agricultural supply. Requirements of this Order specifically implement the Basin Plan.

**Table 5. Basin Plan Beneficial Uses**

<b>Discharge Point</b>	<b>Receiving Water Name</b>	<b>Beneficial Use(s)</b>
LAVWMA San Lorenzo Creek 002	San Lorenzo Creek	<p>Existing Beneficial Uses:</p> <p>Municipal and domestic supply (MUN)</p> <p>Fresh water replenishment (FRSH)</p> <p>Groundwater recharge (GWR)</p> <p>Cold Fresh Water Habitats (COLD)</p> <p>Fish migration (MIGR)</p> <p>Fish spawning (SPWN)</p> <p>Warm Fresh Water Habitats (WARM)</p> <p>Wildlife Habitat (WILD)</p> <p>Contact water recreation (REC-1)</p> <p>Non-contact water recreation (REC-2)</p> <p><u>Since this outfall is very close to the Bay, additional existing beneficial uses for Lower San Francisco Bay are included here:</u></p> <p>Commercial and sport fishing (COMM)</p> <p>Estuarine Habitat (EST)</p> <p>Industrial service supply (IND)</p> <p>Navigation (NAV)</p> <p>Preservation of rare and endangered species (RARE)</p> <p>Shellfish harvesting (SHELL)</p> <p><u>Intermittent Beneficial Use: None</u></p> <p><u>Potential Beneficial Use: None</u></p>
LAVWMA Alamo Canal M-003	Alamo Canal	<p>Existing Beneficial Uses:</p> <p>Groundwater recharge (GWR)</p> <p>Fish migration (MIGR)</p> <p>Fish spawning (SPWN)</p> <p>Wildlife habitat (WILD)</p> <p>Contact water recreation (REC-1)</p> <p>Non-contact water recreation (REC-2)</p> <p><u>Intermittent Beneficial Use(s): None</u></p> <p><u>Potential Beneficial Use(s):</u></p> <p>Cold freshwater habitats (COLD)</p> <p>Warm freshwater habitats (WARM)</p>

- I. National Toxics Rule (NTR) and California Toxics Rule (CTR).** USEPA adopted the NTR on December 22, 1992, which was amended on May 4, 1995 and November 9, 1999, and the CTR on May 18, 2000, which was amended on February 13, 2001. These rules include water quality criteria for priority pollutants and are applicable to this discharge.
- J. State Implementation Policy.** On March 2, 2000, the State Water Board adopted the *Policy for Implementation of Toxics Standards for Inland Surface Waters, Enclosed Bays, and Estuaries of California* (State Implementation Policy or SIP). The SIP became effective on April 28, 2000, with respect to the priority pollutant criteria promulgated for California by the USEPA through the NTR and to the priority pollutant objectives established by the Regional Water Board in the Basin Plan. The SIP became effective on May 18, 2000, with respect to the priority pollutant criteria promulgated by the USEPA through the California Toxics Rule. The State Water Board adopted amendments to the SIP on February 24, 2005, that became effective on July 13, 2005.
- K. Antidegradation Policy.** Section 131.12 of 40 CFR requires that State water quality standards include an antidegradation policy consistent with the federal policy. The State Water Board established California's antidegradation policy in State Water Board Resolution No. 68-16, which incorporates the requirements of the federal antidegradation

policy. Resolution No. 68-16 requires that existing quality of waters be maintained unless degradation is justified based on specific findings. Discharges regulated by this Order should not lower water quality if the terms and conditions of this Order are met. Therefore the permitted discharge is consistent with the antidegradation provision of 40 CFR Section 131.12 and State Water Board Resolution No. 68-16.

- L. Anti-Backsliding Requirements.** Sections 402(o)(2) and 303(d)(4) of the CWA and federal regulations at 40 CFR Section 122.44(l) prohibit backsliding in NPDES permits. These anti-backsliding provisions require effluent limitations in a reissued permit to be as stringent as those in the previous permit, with some exceptions where limitations may be relaxed. All technology based effluent limitations in this Order are at least as stringent as the effluent limitations in the previous Order. This Order does not include WQBELs because discharges have yet to occur from this Facility. In case of a discharge, this permit may be re-opened to include WQBELs.
- M. Monitoring and Reporting.** Section 122.48 of 40 CFR requires that all NPDES permits specify requirements for recording and reporting monitoring results. Sections 13267 and 13383 of the CWC authorize the Regional Water Board to require technical and monitoring reports. The Monitoring and Reporting Program establishes monitoring and reporting requirements to implement Federal and State requirements. This Monitoring and Reporting Program is provided in Attachment E.
- N. Standard and Special Provisions.** Standard Provisions, which in accordance with 40 CFR Sections 122.41 and 122.42, apply to all NPDES discharges and must be included in every NPDES permit, are provided in Attachment D. The Regional Water Board has also included in this Order special provisions applicable to the Dischargers. A rationale for the special provisions contained in this Order is provided in the attached Fact Sheet.
- O. Notification of Interested Parties.** The Regional Water Board has notified the Dischargers and interested agencies and persons of its intent to prescribe Waste Discharge Requirements for the discharge and has provided them with an opportunity to submit their written comments and recommendations. Details of notification are provided in the Fact Sheet of this Order.
- P. Consideration of Public Comment.** The Regional Water Board, in a public meeting, heard and considered all comments pertaining to the discharge. Details of the Public Hearing are provided in the Fact Sheet of this Order.

### III. DISCHARGE PROHIBITIONS

- A. Discharge of treated wastewater at a location or in a manner different from that described in this Order is prohibited.
- B. Discharge during dry weather is prohibited.
- C. Discharge to Alamo Canal is prohibited unless, as a result of an extreme wet weather event, the maximum export pumping capacity is in use, storage capacity of the flow-equalization basins and DSRSD and City of Livermore storage ponds, and required discharge to San Lorenzo Creek are fully utilized, and both the Regional Water Board



and Alameda County Water District have been given prior notification that a discharge to Alamo Canal is needed.

- D. The bypass or overflow of untreated wastewater or wastes to surface waters or surface water drainage courses is prohibited, except as allowed in Standard Provision I.G of Attachment D, Federal Standard Provisions.
- E. The discharge to San Lorenzo Creek shall not exceed 21.5 MGD and shall be limited to flow in excess of available EBDA capacity. The discharge to Alamo Canal shall only occur during a 20-year flow event or greater and shall not exceed 55 MGD.

#### IV. EFFLUENT LIMITATIONS AND DISCHARGE SPECIFICATIONS

##### A. Effluent Limitations

Final Effluent Limitations - Discharge Points San Lorenzo Creek Outfall M-002 and Alamo Canal Outfall M-003

- a. The discharge of the effluent shall maintain compliance with the following effluent limitations at Discharge Points M-002 and M-003:

**Table 6. Effluent Limitations**

Parameter	Units	Effluent Limitations				
		Average Monthly	Average Weekly (1)	Maximum Daily	Instantaneous Minimum	Instantaneous Maximum
Carbonaceous Biochemical Oxygen Demand (CBOD) 5-day @ 20°C	mg/L		40	50		
Total Suspended Solids	mg/L		45	60		
Total Coliform Organisms (2)	MPN/100 mL			1,000		
pH	Standard units				6.5	8.5
Total Chlorine Residual	mg/L					0.0
Oil and Grease	mg/L			20		
Notes:						
(1) Average Weekly effluent limitation applies if a discharge event lasts more than one day, or 24 hour period, in a calendar week.						
(2) The Dischargers shall have an operational goal of 240 MPN/100 mL Total Coliform Organisms.						

- b. The survival of rainbow trout test fish in 96-hour bioassays of the discharge shall not be less than 70%. The test shall be run as static bioassays or static renewal if the discharge occurs over more than one day or 24-hour period.

#### V. RECEIVING WATER LIMITATIONS

##### A. Surface Water Limitations:

Receiving water limitations are based on water quality objectives contained in the Basin Plan and are a required part of this Order.

- 1. The discharge shall not cause the following conditions to exist in Waters of the State at any place:

- a. Floating, suspended, or deposited macroscopic particulate matter or foam;
  - b. Bottom deposits or aquatic growths to the extent that such deposits or growths cause nuisance or adversely affect beneficial uses;
  - c. Alteration of temperature, turbidity, or apparent color beyond present natural background levels;
  - d. Visible, floating, suspended, or deposited oil or other products of petroleum origin; or
  - e. Toxic or other deleterious substances to be present in concentrations or quantities which will cause deleterious effects on wildlife, waterfowl, or other aquatic biota, or which render any of these unfit for human consumption, either at levels created in the receiving waters or as a result of biological concentration.
2. The discharge of waste shall not cause the following limits to be exceeded in waters of the State in any place within one foot of the water surface:
- a. dissolved oxygen                      5.0 mg/l, minimum  
 The median dissolved oxygen concentration for any three consecutive months shall not be less than 80% of the dissolved oxygen content at saturation. When natural factors cause concentrations less than that specified above, then the discharge shall not cause further reduction in ambient dissolved oxygen concentrations.
  - b. Dissolved Sulfide                      0.1 mg/l, maximum
  - c. pH    The pH shall not be depressed below 6.5 nor raised above 8.5, nor caused to vary from normal ambient pH by more than 0.5 pH units.
  - d. Un-ionized Ammonia                      0.4 mg/l as N, maximum  
    0.025 mg/l as N, annual median
3. The discharge shall cause no violation of any particular water quality standard for receiving waters adopted by the Board or the State Board as required by the Clean Water Act and regulations adopted there under.

## B. Groundwater Limitations

The discharge shall cause no violation of the Basin Plan water quality standards for receiving groundwaters.

## VI. PROVISIONS

### A. Standard Provisions

1. **Federal Standard Provisions.** The Dischargers shall comply with all Standard Provisions included in Attachment D of this Order.
2. **Regional Water Board Standard Provisions.** The Dischargers shall comply with all applicable items of the *Standard Provisions and Reporting Requirements for NPDES Surface Water Discharge Permits, August 1993* (Attachment G), including

any amendments thereto. Where provisions or reporting requirements specified in this Order are different from equivalent or related provisions or reporting requirements given in the Standard Provisions, the specifications of this Order shall apply.

## **B. Monitoring and Reporting Program Requirements**

The Dischargers shall comply with the Monitoring and Reporting Program (MRP), and future revisions thereto, in Attachment E of this Order.

## **C. Special Provisions**

1. **Reopener Provisions.** The Regional Water Board may modify or reopen this Order prior to its expiration date in any of the following circumstances:

- a. If present or future investigations demonstrate that the discharge(s) governed by this Order will, or cease to, have adverse impacts on water quality and/or beneficial uses of the receiving waters;
- b. As new or revised WQOs come into effect for the San Francisco Bay estuary and contiguous water bodies (whether statewide, regional, or site-specific). In such cases, effluent limitations in this Order will be modified as necessary to reflect updated WQOs;
- c. If translator or other water quality studies provide a basis for determining that a permit condition(s) should be modified;
- d. An administrative or judicial decision on a separate NPDES permit or WDR that addresses requirements similar to this discharge; and
- e. as authorized by law.

The Dischargers may request permit modification based on b, c, d, and e above. The Dischargers shall include in any such request an antidegradation and antibacksliding analysis.

2. **Special Studies, Technical Reports and Additional Monitoring Requirements.**

Within 180 days after the first discharge to San Lorenzo Creek or Alamo Canal, the Dischargers shall submit a technical report, certified by a California registered engineer, including the following information:

- a. Future wet-weather flow projection data;
- b. Detailed information on facility (i.e. LAVWMA's daily discharge rate to EBDA's pipe, as well as LAVWMA's 18 MG flow equalization reservoirs and DSRSD and City of Livermore storage ponds capacity utilization data) for 30 days prior to discharge and until discharge ceases;

- c. Preventive measures for reducing the risk of future discharges and how the Dischargers will respond to future extreme wet weather events with appropriate updates to their Operation and Maintenance Manuals; and
  - d. A Study Plan proposal with an implementation schedule acceptable to the Executive Officer to determine the rate and extent of the groundwater recharge of the discharge to Alamo Canal during its entire 20 miles travel to the Bay. The Executive Officer shall have 45 days to review and approve the proposed Study Plan. If the Executive Officer does not comment on the proposed Study Plan during this time period, the Study Plan is deemed approved. The Dischargers shall implement the approved Study Plan, and submit a Final Report within 180 days of approval of the Study Plan. Either a California registered engineer or professional geologist may certify this portion of the technical report.
3. In case of no discharge, the Wet Weather Facilities Management Plan sections of the facilities Operations and Maintenance Manuals and Contingency Plans shall be reviewed and updated annually, or within 90 days of completion of any significant facilities or process changes. The dischargers shall submit to the Regional Water Board, by April 15 of each year, a letter describing the results of the review process including an estimated time schedule for completion of any revisions determined necessary, and a description or copy of any completed revisions. The Wet Weather Facilities Management Plan shall be reviewed with the goal of optimizing the use of export, storage, and discharge facilities such that Discharge Prohibitions listed under section III of are attained. The Wet Weather Facilities Management Plan shall be updated with input from Alameda County Water District (ACWD) to assure that Alamo Canal discharge is minimized and coordinated with ACWD operations. The Operation and Maintenance Manual for LAVWMA shall also include preventive measures to reduce the risk of spills, such as spills listed in Table F-2 in the Fact Sheet (Attachment F), and how LAVWMA will respond to these spills. These technical documents shall be certified by a California registered engineer.

## VII. COMPLIANCE DETERMINATION

Compliance with the effluent limitations contained in Section IV of this Order will be determined as specified below:

### A. General.

Compliance with effluent limitations for priority pollutants shall be determined using sample reporting protocols defined in the MRP. Dischargers shall be deemed out of compliance with effluent limitations if the concentration of the monitoring sample is greater than the effluent limitation and greater than or equal to the reporting level (RL).

### B. Average Weekly Effluent Limitation (AWEL).

If the average of daily discharges over a calendar week exceeds the AWEL for a given parameter, an alleged violation will be flagged and the Dischargers will be considered out of compliance for each day of that week for that parameter, resulting in 7 days of non-compliance. The average of daily discharges over the calendar week that exceeds the AWEL for a parameter will be considered out of compliance for that week only. If only a

single sample is taken during the calendar week and the analytical result for that sample exceeds the AWEL, the Dischargers will be considered out of compliance for that calendar week. For any one calendar week during which no sample (daily discharge) is taken, no compliance determination can be made for that calendar week.

**C. Maximum Daily Effluent Limitation (MDEL).**

If a daily discharge exceeds the MDEL for a given parameter, an alleged violation will be flagged and the Dischargers will be considered out of compliance for that parameter for that 1 day only within the reporting period. For any 1 day during which no sample is taken, no compliance determination can be made for that day.

**D. Instantaneous Minimum Effluent Limitation.**

If the analytical result of a single grab sample is lower than the instantaneous minimum effluent limitation for a parameter, a violation will be flagged and the Dischargers will be considered out of compliance for that parameter for that single sample. Non-compliance for each sample will be considered separately (e.g., the results of two grab samples taken within a calendar day that both are lower than the instantaneous minimum effluent limitation would result in two instances of non-compliance with the instantaneous minimum effluent limitation).

**E. Instantaneous Maximum Effluent Limitation.**

If the analytical result of a single grab sample is higher than the instantaneous maximum effluent limitation for a parameter, a violation will be flagged and the Dischargers will be considered out of compliance for that parameter for that single sample. Non-compliance for each sample will be considered separately (e.g., the results of two grab samples taken within a calendar day that both exceed the instantaneous maximum effluent limitation would result in two instances of non-compliance with the instantaneous maximum effluent limitation).

## ATTACHMENTS

Attachment A - Definitions

Attachment B - Map

Attachment C - Flow Schematic

Attachment D - Standard Provisions

Attachment E - Monitoring and Reporting Program (MRP)

Attachment F - Fact Sheet

Attachment G\* - Standard Provisions and Reporting Requirements for NPDES Surface Water Discharge Permits, August 1993

Attachment H\* - Self-Monitoring Program Part A, for NPDES Permits, August 1993

Attachment I - Flow Projection

\* Attachments G and H are not attached due to volume. They are available by contacting the Regional Water Board, or may be downloaded at [www.waterboards.ca.gov/sanfranciscobay/Download.htm](http://www.waterboards.ca.gov/sanfranciscobay/Download.htm)

## ATTACHMENT A – DEFINITIONS

**Average Monthly Effluent Limitation (AMEL):** the highest allowable average of daily discharges over a calendar month, calculated as the sum of all daily discharges measured during a calendar month divided by the number of daily discharges measured during that month.

**Average Weekly Effluent Limitation (AWEL):** the highest allowable average of daily discharges over a calendar week (Sunday through Saturday), calculated as the sum of all daily discharges measured during a calendar week divided by the number of daily discharges measured during that week.

**Daily Discharge:** Daily Discharge is defined as either: (1) the total mass of the constituent discharged over the calendar day (12:00 am through 11:59 pm) or any 24-hour period that reasonably represents a calendar day for purposes of sampling (as specified in the permit), for a constituent with limitations expressed in units of mass or; (2) the unweighted arithmetic mean measurement of the constituent over the day for a constituent with limitations expressed in other units of measurement (e.g., concentration).

The daily discharge may be determined by the analytical results of a composite sample taken over the course of one day (a calendar day or other 24-hour period defined as a day) or by the arithmetic mean of analytical results from one or more grab samples taken over the course of the day.

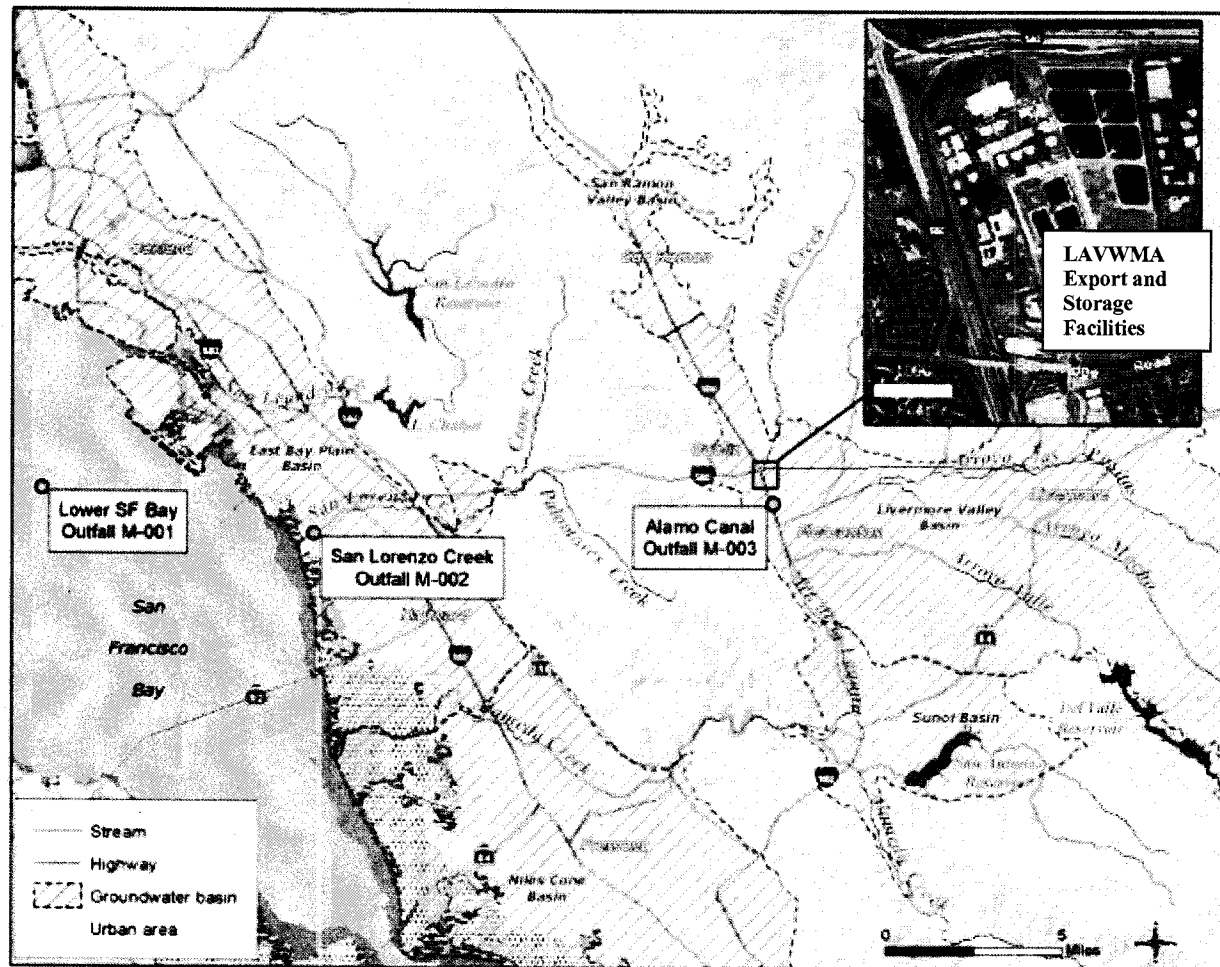
For composite sampling, if 1 day is defined as a 24-hour period other than a calendar day, the analytical result for the 24-hour period will be considered as the result for the calendar day in which the 24-hour period ends.

**Instantaneous Maximum Effluent Limitation:** the highest allowable value for any single grab sample or aliquot (i.e., each grab sample or aliquot is independently compared to the instantaneous maximum limitation).

**Instantaneous Minimum Effluent Limitation:** the lowest allowable value for any single grab sample or aliquot (i.e., each grab sample or aliquot is independently compared to the instantaneous minimum limitation).

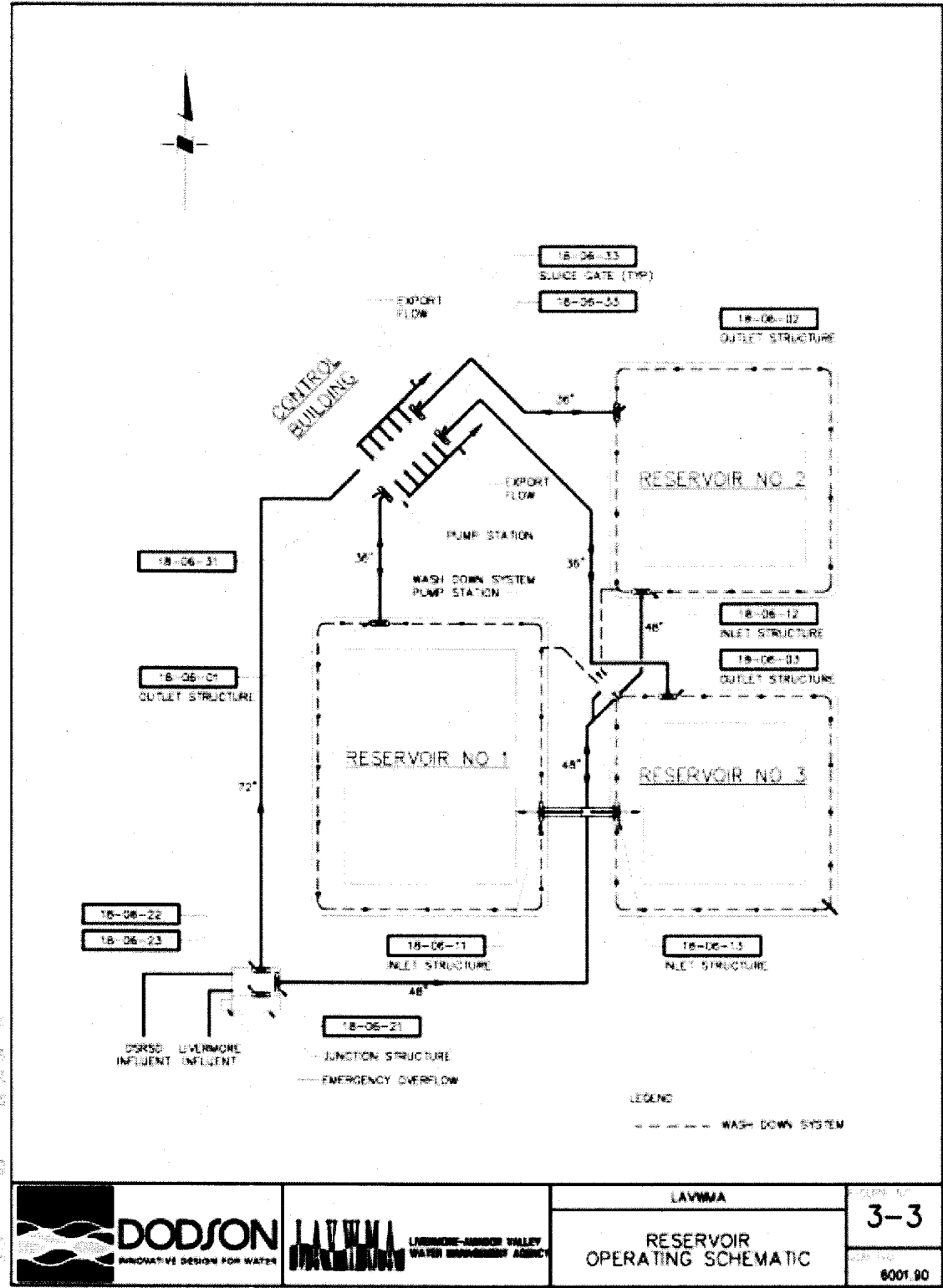
**Maximum Daily Effluent Limitation (MDEL):** the highest allowable daily discharge of a pollutant.

## ATTACHMENT B – MAP



Map date: January 21, 2006 Map author: Jeff Kaprielian, SF Bay Regional Water Quality Control Board

ATTACHMENT C – FLOW SCHEMATIC





## **Attachment D – Federal Standard Provisions**

### **I. STANDARD PROVISIONS – PERMIT COMPLIANCE**

#### **A. Duty to Comply**

1. The Discharger must comply with all of the conditions of this Order. Any noncompliance constitutes a violation of the Clean Water Act (CWA) and the California Water Code (CWC) and is grounds for enforcement action, for permit termination, revocation and reissuance, or denial of a permit renewal application [40 *CFR* §122.41(a)].
2. The Discharger shall comply with effluent standards or prohibitions established under Section 307(a) of the Clean Water Act for toxic pollutants and with standards for sewage sludge use or disposal established under Section 405(d) of the CWA within the time provided in the regulations that establish these standards or prohibitions, even if this Order has not been modified to incorporate the requirement [40 *CFR* §122.41(a)(1)].

#### **B. Need to Halt or Reduce Activity Not a Defense**

It shall not be a defense for a Discharger in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this Order [40 *CFR* §122.41(c)].

#### **C. Duty to Mitigate**

The Discharger shall take all reasonable steps to minimize or prevent any discharge or sludge use or disposal in violation of this Order that has a reasonable likelihood of adversely affecting human health or the environment [40 *CFR* §122.41(d)].

#### **D. Proper Operation and Maintenance**

The Discharger shall at all times properly operate and maintain all facilities and systems of treatment and control (and related appurtenances) which are installed or used by the Discharger to achieve compliance with the conditions of this Order. Proper operation and maintenance also includes adequate laboratory controls and appropriate quality assurance procedures. This provision requires the operation of backup or auxiliary facilities or similar systems that are installed by a Discharger only when necessary to achieve compliance with the conditions of this Order [40 *CFR* §122.41(e)].

#### **E. Property Rights**

1. This Order does not convey any property rights of any sort or any exclusive privileges [40 *CFR* §122.41(g)].
2. The issuance of this Order does not authorize any injury to persons or property or invasion of other private rights, or any infringement of State or local law or regulations [40 *CFR* §122.5(c)].

## F. Inspection and Entry

The Discharger shall allow the Regional Water Quality Control Board (RWQCB), State Water Resources Control Board (SWRCB), United States Environmental Protection Agency (USEPA), and/or their authorized representatives (including an authorized contractor acting as their representative), upon the presentation of credentials and other documents, as may be required by law, to [40 CFR §122.41(i)] [CWC 13383(c)]:

1. Enter upon the Discharger's premises where a regulated facility or activity is located or conducted, or where records are kept under the conditions of this Order [40 CFR §122.41(i)(1)];
2. Have access to and copy, at reasonable times, any records that must be kept under the conditions of this Order [40 CFR §122.41(i)(2)];
3. Inspect and photograph, at reasonable times, any facilities, equipment (including monitoring and control equipment), practices, or operations regulated or required under this Order [40 CFR §122.41(i)(3)];
4. Sample or monitor, at reasonable times, for the purposes of assuring Order compliance or as otherwise authorized by the CWA or the CWC, any substances or parameters at any location [40 CFR §122.41(i)(4)].

## G. Bypass

1. Definitions
  - a. "Bypass" means the intentional diversion of waste streams from any portion of a treatment facility [40 CFR §122.41(m)(1)(i)].
  - b. "Severe property damage" means substantial physical damage to property, damage to the treatment facilities, which causes them to become inoperable, or substantial and permanent loss of natural resources that can reasonably be expected to occur in the absence of a bypass. Severe property damage does not mean economic loss caused by delays in production [40 CFR §122.41(m)(1)(ii)].
2. Bypass not exceeding limitations – The Discharger may allow any bypass to occur which does not cause exceedances of effluent limitations, but only if it is for essential maintenance to assure efficient operation. These bypasses are not subject to the provisions listed in Standard Provisions – Permit Compliance I.G.3 and I.G.5 below [40 CFR §122.41(m)(2)].
3. Prohibition of bypass – Bypass is prohibited, and the Regional Water Board may take enforcement action against a Discharger for bypass, unless [40 CFR §122.41(m)(4)(i)]:
  - a. Bypass was unavoidable to prevent loss of life, personal injury, or severe property damage [40 CFR §122.41(m)(4)(A)];

- b. There were no feasible alternatives to the bypass, such as the use of auxiliary treatment facilities, retention of untreated wastes, or maintenance during normal periods of equipment downtime. This condition is not satisfied if adequate back-up equipment should have been installed in the exercise of reasonable engineering judgment to prevent a bypass that occurred during normal periods of equipment downtime or preventive maintenance [40 CFR §122.41(m)(4)(B)]; and
  - c. The Discharger submitted notice to the Regional Water Board as required under Standard Provision – Permit Compliance I.G.5 below [40 CFR §122.41(m)(4)(C)].
4. The Regional Water Board may approve an anticipated bypass, after considering its adverse effects, if the Regional Water Board determines that it will meet the three conditions listed in Standard Provisions – Permit Compliance I.G.3 above [40 CFR §122.41(m)(4)(ii)].
5. Notice
- a. Anticipated bypass. If the Discharger knows in advance of the need for a bypass, it shall submit a notice, if possible at least 10 days before the date of the bypass [40 CFR §122.41(m)(3)(i)].
  - b. Unanticipated bypass. The Discharger shall submit notice of an unanticipated bypass as required in Standard Provisions - Reporting V.E below [40 CFR §122.41(m)(3)(ii)].

## H. Upset

Upset means an exceptional incident in which there is unintentional and temporary noncompliance with technology based permit effluent limitations because of factors beyond the reasonable control of the permittee. An upset does not include noncompliance to the extent caused by operational error, improperly designed treatment facilities, inadequate treatment facilities, lack of preventive maintenance, or careless or improper operation [40 CFR §122.41(n)(1)].

- 1. Effect of an upset. An upset constitutes an affirmative defense to an action brought for noncompliance with such technology based permit effluent limitations if the requirements of paragraph H.2 of this section are met. No determination made during administrative review of claims that noncompliance was caused by upset, and before an action for noncompliance, is final administrative action subject to judicial review [40 CFR §122.41(n)(2)].
- 2. Conditions necessary for a demonstration of upset. A Discharger who wishes to establish the affirmative defense of upset shall demonstrate, through properly signed, contemporaneous operating logs or other relevant evidence that [40 CFR §122.41(n)(3)]:

- a. An upset occurred and that the Discharger can identify the cause(s) of the upset [40 CFR §122.41(n)(3)(i)];
  - b. The permitted facility was, at the time, being properly operated [40 CFR §122.41(n)(3)(i)];
  - c. The Discharger submitted notice of the upset as required in Standard Provisions – Reporting V.E.2.b [40 CFR §122.41(n)(3)(iii)]; and
  - d. The Discharger complied with any remedial measures required under Standard Provisions – Permit Compliance I.C above [40 CFR §122.41(n)(3)(iv)].
3. Burden of proof. In any enforcement proceeding, the Discharger seeking to establish the occurrence of an upset has the burden of proof [40 CFR §122.41(n)(4)].

## II. STANDARD PROVISIONS – PERMIT ACTION

### A. General

This Order may be modified, revoked and reissued, or terminated for cause. The filing of a request by the Discharger for modification, revocation and reissuance, or termination, or a notification of planned changes or anticipated noncompliance does not stay any Order condition [40 CFR §122.41(f)].

### B. Duty to Reapply

If the Discharger wishes to continue an activity regulated by this Order after the expiration date of this Order, the Discharger must apply for and obtain a new permit [40 CFR §122.41(b)].

### C. Transfers

This Order is not transferable to any person except after notice to the Regional Water Board. The Regional Water Board may require modification or revocation and reissuance of the Order to change the name of the Discharger and incorporate such other requirements as may be necessary under the CWA and the CWC [40 CFR §122.41(l)(3)] [40 CFR §122.61].

### III. STANDARD PROVISIONS – MONITORING

- A. Samples and measurements taken for the purpose of monitoring shall be representative of the monitored activity [40 CFR §122.41(j)(1)].
- B. Monitoring results must be conducted according to test procedures under 40 CFR Part 136 or, in the case of sludge use or disposal, approved under 40 CFR Part 136 unless otherwise specified in 40 CFR Part 503 unless other test procedures have been specified in this Order [40 CFR §122.41(j)(4)] [40 CFR §122.44(i)(1)(iv)].

### IV. STANDARD PROVISIONS – RECORDS

- A. Except for records of monitoring information required by this Order related to the Discharger's sewage sludge use and disposal activities, which shall be retained for a period of at least five years (or longer as required by 40 CFR Part 503), the Discharger shall retain records of all monitoring information, including all calibration and maintenance records and all original strip chart recordings for continuous monitoring instrumentation, copies of all reports required by this Order, and records of all data used to complete the application for this Order, for a period of at least three (3) years from the date of the sample, measurement, report or application. This period may be extended by request of the Regional Water Board Executive Officer at any time [40 CFR §122.41(j)(2)].
- B. Records of monitoring information shall include:
  - 1. The date, exact place, and time of sampling or measurements [40 CFR §122.41(j)(3)(i)];
  - 2. The individual(s) who performed the sampling or measurements [40 CFR §122.41(j)(3)(ii)];
  - 3. The date(s) analyses were performed [40 CFR §122.41(j)(3)(iii)];
  - 4. The individual(s) who performed the analyses [40 CFR §122.41(j)(3)(iv)];
  - 5. The analytical techniques or methods used [40 CFR §122.41(j)(3)(v)]; and
  - 6. The results of such analyses [40 CFR §122.41(j)(3)(vi)].
- C. Claims of confidentiality for the following information will be denied [40 CFR §122.7(b)]:
  - 1. The name and address of any permit applicant or Discharger [40 CFR §122.7(b)(1)]; and
  - 2. Permit applications and attachments, permits and effluent data [40 CFR §122.7(b)(2)].

## V. STANDARD PROVISIONS – REPORTING

### A. Duty to Provide Information

The Discharger shall furnish to the Regional Water Board, SWRCB, or USEPA within a reasonable time, any information which the Regional Water Board, SWRCB, or USEPA may request to determine whether cause exists for modifying, revoking and reissuing, or terminating this Order or to determine compliance with this Order. Upon request, the Discharger shall also furnish to the Regional Water Board, SWRCB, or USEPA copies of records required to be kept by this Order [40 CFR §122.41(h)] [CWC 13267].

### B. Signatory and Certification Requirements

1. All applications, reports, or information submitted to the Regional Water Board, SWRCB, and/or USEPA shall be signed and certified in accordance with paragraph (2.) and (3.) of this provision [40 CFR §122.41(k)].
2. All permit applications shall be signed by either a principal executive officer or ranking elected official. For purposes of this provision, a principal executive officer of a federal agency includes: (i) the chief executive officer of the agency, or (ii) a senior executive officer having responsibility for the overall operations of a principal geographic unit of the agency (e.g., Regional Administrators of USEPA) [40 CFR §122.22(a)(3)].
3. All reports required by this Order and other information requested by the Regional Water Board, SWRCB, or USEPA shall be signed by a person described in Standard Provision V.B.2 above, or by a duly authorized representative of that person. A person is a duly authorized representative only if:
  - a. The authorization is made in writing by a person described in paragraph (2.) of this provision [40 CFR §122.22(b)(1)];
  - b. The authorization specified either an individual or a position having responsibility for the overall operation of the regulated facility or activity such as the position of plant manager, operator of a well or a well field, superintendent, position of equivalent responsibility, or an individual or position having overall responsibility for environmental matters for the company (a duly authorized representative may thus be either a named individual or any individual occupying a named position) [40 CFR §122.22(b)(2)]; and
  - c. The written authorization is submitted to the Regional Water Board, SWRCB, or USEPA [40 CFR §122.22(b)(3)].
4. If an authorization under paragraph (3.) of this provision is no longer accurate because a different individual or position has responsibility for the overall operation of the facility, a new authorization satisfying the requirements of paragraph (3.) of this provision must be submitted to the Regional Water Board, SWRCB or USEPA prior to or together with any reports, information, or applications, to be signed by an authorized representative [40 CFR §122.22(c)].

5. Any person signing a document under paragraph (2.) or (3.) of this provision shall make the following certification:

"I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations" [40 CFR §122.22(d)].

### **C. Monitoring Reports**

1. Monitoring results shall be reported at the intervals specified in the Monitoring and Reporting Program in this Order [40 CFR §122.41(l)(4)].
2. Monitoring results must be reported on a Discharge Monitoring Report (DMR) form or forms provided or specified by the Regional Water Board or SWRCB for reporting results of monitoring of sludge use or disposal practices [40 CFR §122.41(l)(4)(i)].
3. If the Discharger monitors any pollutant more frequently than required by this Order using test procedures approved under 40 CFR Part 136 or, in the case of sludge use or disposal, approved under 40 CFR Part 136 unless otherwise specified in 40 CFR Part 503, or as specified in this Order, the results of this monitoring shall be included in the calculation and reporting of the data submitted in the DMR or sludge reporting form specified by the Regional Water Board [40 CFR §122.41(l)(4)(ii)].
4. Calculations for all limitations, which require averaging of measurements, shall utilize an arithmetic mean unless otherwise specified in this Order [40 CFR §122.41(l)(4)(iii)].

### **D. Compliance Schedules**

Reports of compliance or noncompliance with, or any progress reports on, interim and final requirements contained in any compliance schedule of this Order, shall be submitted no later than 14 days following each schedule date [40 CFR §122.41(l)(5)].

### **E. Twenty-Four Hour Reporting**

1. The Discharger shall report any noncompliance that may endanger health or the environment. Any information shall be provided orally within 24 hours from the time the Discharger becomes aware of the circumstances. A written submission shall also be provided within five (5) days of the time the Discharger becomes aware of the circumstances. The written submission shall contain a description of the noncompliance and its cause; the period of noncompliance, including exact dates and times, and if the noncompliance has not been corrected, the anticipated time it is

expected to continue; and steps taken or planned to reduce, eliminate, and prevent reoccurrence of the noncompliance [40 CFR §122.41(l)(6)(i)].

2. The following shall be included as information that must be reported within 24 hours under this paragraph [40 CFR §122.41(l)(6)(ii)]:
  - a. Any unanticipated bypass that exceeds any effluent limitation in this Order [40 CFR §122.41(l)(6)(ii)(A)].
  - b. Any upset that exceeds any effluent limitation in this Order [40 CFR §122.41(l)(6)(ii)(B)].
  - c. Violation of a maximum daily discharge limitation for any of the pollutants listed in this Order to be reported within 24 hours [40 CFR §122.41(l)(6)(ii)(C)].
3. The Regional Water Board may waive the above-required written report under this provision on a case-by-case basis if an oral report has been received within 24 hours [40 CFR §122.41(l)(6)(iii)].

#### **F. Planned Changes**

The Discharger shall give notice to the Regional Water Board as soon as possible of any planned physical alterations or additions to the permitted facility. Notice is required under this provision only when [40 CFR §122.41(l)(1)]:

1. The alteration or addition to a permitted facility may meet one of the criteria for determining whether a facility is a new source in 40 CFR §122.29(b) [40 CFR §122.41(l)(1)(i)]; or
2. The alteration or addition could significantly change the nature or increase the quantity of pollutants discharged. This notification applies to pollutants which are subject neither to effluent limitations in this Order nor to notification requirements under 40 CFR Part 122.42(a)(1) (see Additional Provisions—Notification Levels VII.A.1) [40 CFR §122.41(l)(1)(ii)].
3. The alteration or addition results in a significant change in the Discharger's sludge use or disposal practices, and such alteration, addition, or change may justify the application of permit conditions that are different from or absent in the existing permit, including notification of additional use or disposal sites not reported during the permit application process or not reported pursuant to an approved land application plan [40 CFR §122.41(l)(1)(iii)].

#### **G. Anticipated Noncompliance**

The Discharger shall give advance notice to the Regional Water Board or SWRCB of any planned changes in the permitted facility or activity that may result in noncompliance with General Order requirements [40 CFR §122.41(l)(2)].



## H. Other Noncompliance

The Discharger shall report all instances of noncompliance not reported under Standard Provisions – Reporting E.3, E.4, and E.5 at the time monitoring reports are submitted. The reports shall contain the information listed in Standard Provision – Reporting V.E [40 CFR §122.41(l)(7)].

## I. Other Information

When the Discharger becomes aware that it failed to submit any relevant facts in a permit application, or submitted incorrect information in a permit application or in any report to the Regional Water Board, SWRCB, or USEPA, the Discharger shall promptly submit such facts or information [40 CFR §122.41(l)(8)].

## VI. STANDARD PROVISIONS – ENFORCEMENT

- A. The CWA provides that any person who violates section 301, 302, 306, 307, 308, 318 or 405 of the Act, or any permit condition or limitation implementing any such sections in a permit issued under section 402, or any requirement imposed in a pretreatment program approved under sections 402(a)(3) or 402(b)(8) of the Act, is subject to a civil penalty not to exceed \$25,000 per day for each violation. The CWA provides that any person who negligently violates sections 301, 302, 306, 307, 308, 318, or 405 of the Act, or any condition or limitation implementing any of such sections in a permit issued under section 402 of the Act, or any requirement imposed in a pretreatment program approved under section 402(a)(3) or 402(b)(8) of the Act, is subject to criminal penalties of \$2,500 to \$25,000 per day of violation, or imprisonment of not more than one (1) year, or both. In the case of a second or subsequent conviction for a negligent violation, a person shall be subject to criminal penalties of not more than \$50,000 per day of violation, or by imprisonment of not more than two (2) years, or both. Any person who knowingly violates such sections, or such conditions or limitations is subject to criminal penalties of \$5,000 to \$50,000 per day of violation, or imprisonment for not more than three (3) years, or both. In the case of a second or subsequent conviction for a knowing violation, a person shall be subject to criminal penalties of not more than \$100,000 per day of violation, or imprisonment of not more than six (6) years, or both. Any person who knowingly violates section 301, 302, 303, 306, 307, 308, 318 or 405 of the Act, or any permit condition or limitation implementing any of such sections in a permit issued under section 402 of the Act, and who knows at that time that he thereby places another person in imminent danger of death or serious bodily injury, shall, upon conviction, be subject to a fine of not more than \$250,000 or imprisonment of not more than 15 years, or both. In the case of a second or subsequent conviction for a knowing endangerment violation, a person shall be subject to a fine of not more than \$500,000 or by imprisonment of not more than 30 years, or both. An organization, as defined in section 309(c)(3)(B)(iii) of the Clean Water Act, shall, upon conviction of violating the imminent danger provision, be subject to a fine of not more than \$1,000,000 and can be fined up to \$2,000,000 for second or subsequent convictions [40 CFR §122.41(a)(2)] [CWC 13385 and 13387].
- B. Any person may be assessed an administrative penalty by the Regional Water Board for violating section 301, 302, 306, 307, 308, 318 or 405 of this Act, or any permit condition or limitation implementing any of such sections in a permit issued under section 402 of

this Act. Administrative penalties for Class I violations are not to exceed \$10,000 per violation, with the maximum amount of any Class I penalty assessed not to exceed \$25,000. Penalties for Class II violations are not to exceed \$10,000 per day for each day during which the violation continues, with the maximum amount of any Class II penalty not to exceed \$125,000 [40 CFR §122.41(a)(3)].

- C. The CWA provides that any person who falsifies, tampers with, or knowingly renders inaccurate any monitoring device or method required to be maintained under this permit shall, upon conviction, be punished by a fine of not more than \$10,000, or by imprisonment for not more than 2 years, or both. If a conviction of a person is for a violation committed after a first conviction of such person under this paragraph, punishment is a fine of not more than \$20,000 per day of violation, or by imprisonment of not more than 4 years, or both [40 CFR §122.41(j)(5)].
- D. The CWA provides that any person who knowingly makes any false statement, representation, or certification in any record or other document submitted or required to be maintained under this Order, including monitoring reports or reports of compliance or noncompliance shall, upon conviction, be punished by a fine of not more than \$10,000 per violation, or by imprisonment for not more than six months per violation, or by both [40 CFR §122.41(k)(2)].

## VII. ADDITIONAL PROVISIONS – NOTIFICATION LEVELS

### A. Non-Municipal Facilities

Not Applicable

### B. Publicly-Owned Treatment Works (POTWs)

All POTWs shall provide adequate notice to the Regional Water Board of the following [40 CFR §122.42(b)]:

1. Any new introduction of pollutants into the POTW from an indirect discharger that would be subject to Sections 301 or 306 of the CWA if it were directly discharging those pollutants [40 CFR §122.42(b)(1)]; and
2. Any substantial change in the volume or character of pollutants being introduced into that POTW by a source introducing pollutants into the POTW at the time of adoption of the Order [40 CFR §122.42(b)(2)].

Adequate notice shall include information on the quality and quantity of effluent introduced into the POTW as well as any anticipated impact of the change on the quantity or quality of effluent to be discharged from the POTW [40 CFR §122.42(b)(3)].

## **ATTACHMENT E – MONITORING AND REPORTING PROGRAM (MRP)**

The Code of Federal Regulations (CFR) at 40 CFR §122.48 requires that all NPDES permits specify monitoring and reporting requirements. CWC sections 13267 and 13383 also authorize the Regional Water Board to require technical and monitoring reports. This MRP establishes monitoring and reporting requirements which implement federal and California regulations.

### **I. GENERAL MONITORING PROVISIONS**

- A.** The Dischargers shall comply with the MRP for this Order as adopted by the Regional Water Board and with Self-Monitoring Program Part A, for NPDES Permits, August 1993 (Attachment H). The MRP may be amended by the Executive Officer pursuant to USEPA regulations 40 CFR 122.62, 122.63, and 124.5. If any discrepancies exist between the MRP and the Attachment H requirements, the MRP prevails.
- B.** Sampling is required mainly during those periods when discharging. All analysis shall be conducted using current USEPA methods, or that have been approved by the USEPA Regional Administrator pursuant to 40 CFR 136.4 and 40 CFR 136.5, or equivalent methods that are commercially and reasonably available, and that provide quantification of sampling parameters and constituents sufficient to evaluate compliance with applicable effluent limits or to determine if additional effluent limitations are needed. The Regional Water Board will find the Dischargers in violation of the limitation if the discharge concentration exceeds the effluent limitation and the Reporting Level for the analysis for that constituent.

### **II. MONITORING LOCATIONS**

The Dischargers shall establish the following monitoring locations to demonstrate compliance with the effluent limitations, discharge specifications, and other requirements in this Order:

**Table E-1. Monitoring Locations Description**

Discharge Point Name	Monitoring Location Name	Monitoring Location Description
001	M-001	LAVWMA discharge to EBDA Outfall (Latitude 37°, 41', 40"N and Longitude 122°, 17', 42"W)
002	M-002	At any point in the dischargers' facility at which adequate disinfection and dechlorination of secondary effluent has taken place and prior to the point of discharge to San Lorenzo Creek (Latitude 37°, 40', 30"N and Longitude 122°, 09', 14"W)
003	M-003	At any point in the dischargers' facility at which adequate disinfection and dechlorination of secondary effluent has taken place and prior to the point of discharge to Alamo Canal (Latitude 37° 41' 10"N and Longitude 121° 54' 54"W)
--	R-001U	At a point located 100 feet upstream from San Lorenzo Creek discharge point, or if access is limited, at the first point upstream which is accessible or at the first weather permitting opportunity while the discharge is occurring
--	R-001D	At a point located 100 feet downstream from San Lorenzo Creek discharge point, or if access is limited, at the first point downstream which is accessible or at the first weather permitting opportunity while the discharge is occurring
--	R-002U	At a point located 100 feet upstream from Alamo Canal discharge point, or if access is limited, at the first point upstream which is accessible or at the first weather permitting opportunity while the discharge is occurring
--	R-002D	At a point located 100 feet downstream from Alamo Canal discharge point, or if access is limited, at the first point downstream which is accessible or at the first weather permitting opportunity while the discharge is occurring

**III. INFLUENT MONITORING REQUIREMENTS - Not Applicable****IV. EFFLUENT MONITORING REQUIREMENTS****A. Monitoring Flow Rate Discharged to EBDA Deep Outfall**

The Dischargers shall monitor the flow rate discharged to EBDA M-001 outfall at a monitoring location located either at LAVWMA or EBDA transport systems as follows:

**Table E-2. Flow Discharged to EBDA outfall**

Parameter	Units	Sample Type	Minimum Sampling Frequency
Flow	MGD	Continuous	Continuous

**B. Monitoring Location M-002 and M-003****Table E-3. Monitoring Parameters for Monitoring Locations M-002 and M-003**

Parameter	Units	Sample Type	Minimum Sampling Frequency	Recommended Analytical Test Method Number, USEPA Report Number, and/or 40 CFR Part
Carbonaceous Biochemical Oxygen Demand 5-day @ 20°C	mg/L	Grab	O	SM 5210B follow step 4.e.6 for nitrification inhibition
Total Suspended Solids	mg/L	Grab	O	SM 2540 D
Total Chlorine Residual	mg/L	Grab	O	SM 450-C1 B, C, D, F, or G
Total Coliform Organisms	MPN	Grab	O	SM 9221 B
pH	Units	Grab	O	SM 4500-H+ B
Oil and Grease	mg/L	Grab	O	EPA 1664
Flow	MGD	Continuous	Each discharge event	During extreme storm events, the gallon per minute flow rate shall also be reported for every hour of that extreme storm period
Volume of treated wastewater stored in flow equalization	MG	Continuous	During each discharge event	Best Professional Measurement

Parameter	Units	Sample Type	Minimum Sampling Frequency	Recommended Analytical Test Method Number, USEPA Report Number, and/or 40 CFR Part
reservoirs and storage ponds				
Total Solids	mg/L	Grab	O	SM 2540B
Total Dissolved Solids	mg/L	Grab	O	SM 2540 C
Temperature	Degree C	Grab	O	SM 2550 B
Nitrate (as N and NO <sub>3</sub> )	mg/L	Grab	O	SM 4500-NO <sub>3</sub> - E, F, or H
Nitrite (as N)	mg/L	Grab	O	SM 4500-NO <sub>2</sub> - B
Total Ammonia (as N)	mg/L	Grab	O	SM 4500-NH <sub>3</sub> + C, D, E, F, or G
Un-ionized Ammonia (as N)	mg/L	Calculated from Total Ammonia	O	Calculated from Total Ammonia
Copper	ug/L	Grab	O	EPA 200.9
Lead	ug/L	Grab	O	EPA 200.9
Mercury	ug/L	Grab	O	EPA 1631
Nickel	ug/L	Grab	O	EPA 249.2
Selenium	ug/L	Grab	O	SM 3114B or C
Silver	ug/L	Grab	O	EPA 272.2
Zinc	ug/L	Grab	O	EPA 200 or EPA 289
Cyanide	ug/L	Grab	O	Standard Method 4500-CN <sup>-</sup> C or I
TCDD TEQ	ug/L	Grab	O	EPA 1613
Chlorodibromo-methane	ug/L	Grab	O	EPA 601
Dichlorobromo-methane	ug/L	Grab	O	EPA 601
Bis(2-ethylhexyl) Phthalate	ug/L	Grab	O	EPA 606 or EPA 625
Chrysene	ug/L	Grab	O	EPA 625
Aldrin	ug/L	Grab	O	EPA 608
Alpha-BHC	ug/L	Grab	O	EPA 608
Beta-BHC	ug/L	Grab	O	EPA 608
Gamma-BHC	ug/L	Grab	O	EPA 608
Chlordane	ug/L	Grab	O	EPA 608
Dieldrin	ug/L	Grab	O	EPA 608
Total PCBs	ug/L	Grab	O	EPA 608
Tributyltin	ug/L	Grab	O	Batelle N-0959-2606, EBMUD method for treated wastewater, or SM 6710 (online version only)
Diazinon	ug/L	Grab	O	EPA 614
Chlorpyrifos	ug/L	Grab	O	EPA 614
Asbestos	mg/L	Grab	O	EPA 100.2 (EPA 600/R-94-134, June 1994)
DDT	ug/L	Grab	O	EPA 608
Notes: O = Once during the discharge event. SM = Standard Methods				

## V. Whole Effluent Toxicity Testing Requirements

In case of a discharge to M-002, M-003, or both, the Dischargers shall monitor the acute toxicity of dechlorinated effluent at monitoring locations M-002 or M-003, or de-chlorinated-flow-weighted composite effluent samples from DSRSD and City of Livermore as follows:

**Table E-4. Toxicity Testing for Monitoring Locations M-002 and M-003**

Parameter	Units	Sample Type	Minimum Sampling Frequency	Required Analytical Test Method
96-hour acute toxicity on rainbow trout test fish(1)	% Survival	Grab	Once during any discharge period	US EPA October 2002 5 <sup>th</sup> Edition (EPA-821-R-02-012)
Note (1): The test shall be run as static bioassays or static renewal if the discharge occurs over more than one day or 24-hour period.				

**VI. LAND DISCHARGE MONITORING REQUIREMENTS - Not Applicable****VII. RECLAMATION MONITORING REQUIREMENTS - Not Applicable****VIII. RECEIVING WATER MONITORING REQUIREMENTS**

The Dischargers shall monitor San Lorenzo Creek and Alamo Canal at monitoring locations R-001U, R-001D, R-002U, R-002D as follows:

**Table E-5. Receiving Water Monitoring Locations R-001U, R-001D, R-002U, and R-002D**

Parameter	Units	Sample Type	Minimum Sampling Frequency	Required Analytical Test Method Number , USEPA Report Number, and/or 40 CFR Part
All Applicable Standard Observations		Observe and take pictures as needed	Once during the discharge event	Standard Observations

**IX. OTHER MONITORING REQUIREMENTS - Not Applicable****X. REPORTING REQUIREMENTS****A. General Monitoring and Reporting Requirements**

The Dischargers shall comply with all Standard Provisions (Attachment D) and Standard Provisions and Reporting Requirements for NPDES Surface Water Discharge Permits, August 1993 (Attachment G) and Self-Monitoring Program Part A, for NPDES Permits, August 1993 (Attachment H) related to monitoring, reporting, and record keeping.

**B. Self Monitoring Reports (SMRs)**

1. At any time during the term of this permit, the State or Regional Water Board may notify the Dischargers to electronically submit self-monitoring reports. Until such notification is given, the Dischargers shall submit self-monitoring reports in accordance with the requirements described below. The Dischargers have the option to submit all monitoring results in an electronic reporting format approved by the Executive Officer.
2. The Dischargers shall submit Self Monitoring Reports including the results of all required monitoring using USEPA-approved test methods or other test methods specified in this Order. These reports are due on May 1 of each year covering the monitoring conducted during the entire year.
3. Monitoring periods and reporting for all required monitoring shall be completed according to the following schedule:

**Table E-6. Monitoring Periods and Reporting Requirements**

Sampling Frequency	Monitoring Period Begins On...	Monitoring Period	SMR Due Date
As described in Tables E-3, E-4, and E-5	First day of each discharge event	From first day until the last day of each discharge event	May 1

4. The Dischargers shall report with each sample result the applicable Minimum Level (ML) and the current Method Detection Limit (MDL), as determined by the procedure in 40 CFR Part 136.
5. The Dischargers shall arrange all reported data in a tabular format. The data shall be summarized to clearly illustrate whether the facility is operating in compliance with interim and/or final effluent limitations.
6. The Dischargers shall attach a cover letter to the SMR. The information contained in the cover letter shall clearly identify violations of the WDRs; discuss corrective actions taken or planned; and the proposed time schedule for corrective actions. Identified violations must include a description of the requirement that was violated and a description of the violation.
7. SMRs must be submitted to the Regional Water Board, signed and certified as required by the standard provisions (Attachment D), to the address listed on the next page:

**California Regional Water Quality Control Board  
San Francisco Bay Region  
1515 Clay Street, Suite 1400  
Oakland, CA 94612**

**C. Discharge Monitoring Reports (DMRs)**

1. As described in Section X.B.1 above, at any time during the term of this permit, the State or Regional Water Board may notify the Dischargers to electronically submit self-monitoring reports. Until such notification is given, the Dischargers shall submit discharge monitoring reports (DMRs) in accordance with the requirements described below.
2. DMRs must be signed and certified as required by the standard provisions (Attachment D). The Discharge shall submit the original DMR and one copy of the DMR to the address listed below:

State Water Resources Control Board  
Discharge Monitoring Report Processing Center  
Post Office Box 671  
Sacramento, CA 95812
3. All discharge monitoring results must be reported on the official USEPA pre-printed DMR forms (EPA Form 3320-1). Forms that are self-generated or modified cannot be accepted.

## ATTACHMENT F – FACT SHEET

As described in Section II of this Order, this Fact Sheet includes the legal requirements and technical rationale that serve as the basis for the requirements of this Order.

### I. PERMIT INFORMATION

- A. Livermore-Amador Valley Water Management Agency (LAVWMA), Dublin San Ramon Services District (DSRSD), and City of Livermore are named as Dischargers. LAVWMA is the owner of the 18 MG storage reservoirs, 41.2 MGD pump station, approximately 16-mile transmission line, and San Lorenzo Creek and Alamo Canal dechlorination stations. DSRSD and City of Livermore are the owners of the 18.9 MG and 15 MG storage ponds, respectively. LAVWMA has a contract with DSRSD for operating and maintaining the LAVWMA export pipeline, pump stations, and both dechlorination facilities.
- B. For a discharge of treated wastewater to San Lorenzo Creek and Alamo Canal, both waters of the United States, the Facility is currently subject to Order 99-023, which was adopted on May 25, 1999, and expired on May 25, 2004. The terms and conditions of the current Order have been automatically continued and remain in effect until new Waste Discharge Requirements and NPDES permit are adopted pursuant to this Order.
- C. LAVWMA filed a report of waste discharge and submitted an application for renewal of its Waste Discharge Requirements (WDRs) and National Pollutant Discharge Elimination System (NPDES) permit on April 27, 2004. Supplemental Information was requested beginning on January 18, 2005, and received on May 3, 2005, May 23, 2005, November 28, 2005, December 13, 2005, and December 20, 2005. A site visit was conducted on January 18, 2005, to observe operations and collect additional data to develop permit limitations and conditions. The Dischargers do not expect to discharge during the term of this permit (as projected in Attachment H) because a recent pipe-facility expansion has provided ample pumping capacity to handle flows during extreme storm events.

### II. FACILITY DESCRIPTION

- A. **Description of Dry and Extreme Storm Events Weather Flow Management**  
The Dischargers have been using EBDA's system for decades without any need to discharge to San Lorenzo Creek or Alamo Canal. During dry weather, LAVWMA receives an average flow of 16.5 MGD of secondary treated wastewater from DSRSD and City of Livermore. During extreme storm events, however, LAVWMA expects a significantly more secondary treated wastewater flow. For example, during the El Nino storm on January 10, 1998, LAVWMA reported a secondary treated wastewater flow of 33.6 MGD. LAVWMA's contract with EBDA allows up to 41.2 MGD discharge to EBDA's facility, but the contract requires the discharge to EBDA's pipe to be reduced to 19.7 MGD should EBDA not have adequate capacity to accept the additional 21.5 MGD of flow during extreme storm events. During extreme storm events, LAVWMA maintains its maximum export pumping capacity and, together with its member agencies, use their combined storage facilities, including DSRSD 18.9 MG and City of Livermore 15 MG storage ponds to increase in-valley flow equalization capacity as explained in Finding II.B.



**B. Discharge Points and Receiving Water**

As explained in Tables 2 and 4. San Lorenzo Creek De-chlorination facility is located inside the Alameda County Flood Control Facility at the southern end of Anchorage Way (crossing Lewelling Boulevard) nearby San Lorenzo Creek.

**C. Summary of Existing Requirements and Self-Monitoring Report (SMR) Data**

Effluent limitations contained in the existing Order for discharges to San Lorenzo Creek and Alamo Canal (Monitoring Locations M-002 and M-003) and representative monitoring data from the term of the previous Order are as follows:

**Table F-1. Historic Effluent Limitation and Monitoring Data**

Parameter (units)	Effluent Limitation			Monitoring Data (From May 25, 1999 To April, 2006)		
	Average Monthly	Average Weekly	Maximum Daily	Highest Average Monthly Discharge	Highest Average Weekly Discharge	Highest Daily Discharge
Total Suspended Solids (mg/L)			60	This discharge has never occurred.		
Settleable Matter/ ml/L-hr			0.2			
Total Chlorine Residual (mg/L)			0.00			
Carbonaceous Biochemical Oxygen Demand 5-day @ 20°C (mg/L)			50			
Oil and Grease (mg/L)			20			
pH	The pH of the discharge shall not exceed 9.0 nor be less than 6.0					
Total Coliform Bacteria/MPN	Value for the Most Probable Number (MPN) of total coliform bacteria in any single sample shall not exceed 1,000 MPN/100 ml which is expected value in receiving waters. The operational goal for the discharges shall be 240 MPN/100 ml.					
Acute Toxicity (percent survival rate)	The survival of organisms in undiluted effluent shall be an eleven (11) sample median value of not less than 90 percent survival, and an eleven (11) sample 90th percentile value of not less than 70 percent survival.					
Lead /µg/l (for Alamo Canal only)	5.6 µg/l Daily Average					
Mercury/µg/l	5.6 µg/l Daily Average				This discharge has never occurred.	

**D. Compliance Summary**

No discharge has occurred under the current waste discharge requirements. However, the Dischargers reported 27 spills for the period from October 20, 1999, through October 25, 2005, and the completed corrective actions as of December 20, 2005. Table F-2 lists the spills and completed corrective actions.

**Table F-2. LAVWMA Spills (October 20, 1999, through October 25, 2005) and Status of Corrective Actions as of December 20, 2005**

DATE	VOLUME	LOCATION	Cause	Current Status of Corrective Actions as of December 20, 2005
10/20/99	600 gallons	5 East Lewelling Blvd.	Cracked 1/2" valve	New valve
11/06/99	Foam-secondary effluent	Oceanview Dr.-Hayward	Failed vent Valve	New valve
01/02/00	Foam-secondary effluent	Eden Canyon Rd. Castro-Valley	Failed vent Valve	New valve
01/06/00	Foam-secondary effluent	Dublin Canyon Rd-Castro-Valley	Failed vent Valve	New valve
01/10/00	Foam-secondary effluent	Dublin Canyon Rd-Castro-Valley	Failed vent Valve	New valve
04/24/00	Foam-secondary effluent	Dublin Canyon Rd-Castro-Valley	Failed vent Valve	New valve
06/03/01	Foam-secondary effluent	Mission & Georgan-San Leandro	Failed vent Valve	New valve
11/02/01	Foam-secondary effluent	Mission & Georgan-San Leandro	Failed vent Valve	New valve
11/12/01	Foam-secondary effluent	Lewelling Blvd.	Failed vent Valve	New valve
12/20/01	Foam-secondary effluent	Lewelling Blvd.	Failed vent Valve	New valve
01/10/02	500 Gallons secondary effluent	Lewelling Blvd. & Brunswick	Failed vent Valve	New valve
02/15/02	No volume noted	Dublin-Canyon & Foothill, Pleasanton, Ca.	Contractor Hit Pipe	Contractor repaired pipe
10/30/02	20,000-30,000 gallons of secondary effluent	Foothill Blvd. between Grove and Apple in the City of Hayward	Pipewall Failure	New pipeline
02/18/02	<50 gallons	East Castro Valley Blvd, Castro Valley	Failed vent Valve	New valve
04/16/03	500 gallons of secondary effluent	Near the intersection of Dublin Canyon and Five Canyons Road in Castro Valley	Pipewall Failure	New pipeline
04/19/03	2000 gallons of secondary effluent	Near 9000 Dublin Canyon Road in Castro Valley	Failed vent Valve	New valve
05/15/03	15 to 20 gallons per minute	At the intersection of Grove Way and Oak Street in Castro Valley	Pipewall Failure	New pipeline
07/10/03	153,000 gallons of potable testing water	East Castro Valley Blvd., Castro Valley	Contractor Error	Contractor repaired testing apparatus
01/06/04	50,000 gallons of secondary effluent	Castro Valley	Not Reported	Not Reported
04/14/04	Foam-secondary effluent	Lewelling Blvd. and Mission Blvd.	Failed vent Valve	New valve
10/09/04	216,000 gallons of secondary effluent	20840 Birch Street, Castro Valley	Failed vent Valve	New valve
10/21/04	1,800 gallons of secondary effluent	Castro Valley Blvd., Castro Valley	Pipewall Failure	New pipeline
10/26/04	1,200 gallons of secondary effluent	Gail Drive and Grove Way, Castro Valley	Pipewall Failure	New pipeline
02/02/05	200,000 gallons of potable water(hydrostatic test)	Intersection of Dublin Canyon Road and Canyon Creek Circle in Pleasanton, CA	Pipe joint Failure During Construction Pipe Test	Pipe-joint replaced by Contractor
08/29/05	5 to 7 gallons per minute (call received at 15:30 pm - secured at 15:40 pm)	Inglewood Drive between Willow Road and Chabot Drive in Pleasanton	Failed vent Valve	New valve
09/13/05	500 gallons of secondary effluent	Lewelling Blvd. between Brunswick and Calgary Streets in San Leandro	Failed vent Valve	New valve
10/25/05	5,000 gallons of secondary effluent/Contained	LAVWMA Pump Station	Valve alignment	Alignment corrected

**III. APPLICABLE PLANS, POLICIES, AND REGULATIONS**

The requirements contained in the Order are based on the requirements and authorities described in this section.

**A. Legal Authorities:**

Legal authorities are Section 402 of Clean Water Act, Chapter 5.5 in Division 7 of the California Water Code (CWC), and Article 4 in Chapter 4 of the CWC. NPDES Permit/USEPA concurrences are based on 40 CFR 123 and Order expiration and reapplication are based on 40 CFR 122.46(a).

**B. State and Federal Regulations, Policies, and Plans****1. Water Quality Control Plan (Basin Plan).**

All beneficial uses listed in the Order are from Basin Plan. The beneficial uses for San Lorenzo Creek and lower San Francisco Bay are listed in Table 2-4 (Page 2-17). The tributary rule is explained on Page 2-5. The beneficial uses for Alamo Canal are listed in Table 2-1 of the November 2005 amendment. The beneficial uses for the groundwater basins are listed in Table 2-9 (page 2-28).

**2. Thermal Plan.**

The State Water Board adopted a Water Quality Control Plan for Control of Temperature in the Coastal and Interstate Water and Enclosed Bays and Estuaries of California (Thermal Plan) on May 18, 1972, and amended this plan on September 18, 1975. This plan contains temperature objectives for surface waters. The Regional Board has included this Plan in Page 3-4 of the Basin Plan.

**3. State Implementation Policy.**

The SIP includes procedures for determining the need for and calculating water quality-based effluent limitations (WQBELs), and requires Dischargers to submit data sufficient to do so. The SIP also requires that final concentration-based WQBELs be included for all pollutants having reasonable potential to cause or contribute to an exceedence of applicable water quality standards. This Order requires the Dischargers to submit monitoring data per Attachment E. These data will be used to determine the need for and calculating WQBELs for all groups of pollutants listed in CTR and Basin Plan that are related to this discharge.

**4. Anti-Backsliding Requirements.**

The previous permit had effluent limits for Lead and Mercury, but this permit has no water quality based effluent limits. This is because no discharge has occurred, and the most representative monitoring data do not support that combined effluent poses a threat to water quality. For example, Lead and Mercury were not detected in concentrations exceeding the applicable water quality objectives in a December 2003 grab sample of the combined effluent discharged to EBDA's pipe. The previous permit also had effluent limits for Settleable Matter, but this permit has no such limits. The basis for this deletion is the exception provided by the January 2004 amended Basin Plan that requires no Settleable Matter limitations for secondary and advanced sewage treatment plants. This relaxation of effluent limitations is consistent with the anti-backsliding requirements of the CWA and federal regulations.

**5. Best professional judgment (BPJ).**

BPJ is defined as the highest quality technical opinion developed by a permit writer after

consideration of all reasonably available and pertinent data or information that forms the basis for the terms and conditions of a NPDES permit. The authority for BPJ is contained in Section 402(a)(1) of the CWA.

### **C. Impaired Water Bodies on CWA 303(d) List and other documents**

On June 6, 2003, the USEPA approved a revised list of impaired water bodies prepared by the State (hereinafter referred to as the 303(d) list). The pollutant listed as impairing San Lorenzo Creek and Alameda Creek is diazinon and pollutants impairing the lower San Francisco Bay include chlordane, DDT, diazinon, dieldrin, dioxin compounds, exotic species, furan compounds, mercury, nickel, total PCBs, and PCBs (dioxin like). Municipal wastewater treatment facilities provided no information that their facilities may be a major source of "exotic" species. The SIP requires final effluent limitations for all 303(d)-listed pollutants to be based on total maximum daily loads and associated waste load allocations. Zone 7 Water Agency has also reported groundwater basins impairment collectively referred to as "increasing level of total dissolved solids in the main groundwater basin".

## **IV. RATIONALE FOR EFFLUENT LIMITATIONS AND DISCHARGE SPECIFICATIONS**

The CWA requires point source discharges to control the amount of conventional, non-conventional, and toxic pollutants that are discharged into the waters of the United States. The control of pollutants discharged is established through effluent limitations; and other requirements in NPDES permits. There are two principal bases for effluent limitations: 40 CFR Section 122.44(a) requires that permits include applicable technology-based limitations and standards; and 40 CFR Section 122.44(d) requires that permits include water quality-based effluent limitations to attain and maintain applicable numeric and narrative water quality criteria to protect the beneficial uses of the receiving water. This permit includes prohibitions and effluent limitations based on Basin Plan and BPJ.

### **A. Discharge Prohibitions**

**Prohibition III.A**, no discharge of treated wastewater at a location or in a manner different from that described in this Order, is based on CWC that requires filing of a report of waste discharge before a permit to discharge can be granted.

**Prohibition III.B**, no discharge during dry weather, is based on BPJ and the following facts:

- Both DSRSD and City of Livermore have separate NPDES permits for continuous discharges to Lower San Francisco Bay; and
- LAVWMA submitted the waste discharge application for discharges only during extreme storm events and the waste discharge requirements in this permit are only for discharges during extreme storm events.

**Prohibition III.C**, discharge to Alamo Canal is prohibited unless, as a result of an extreme wet weather event, the maximum export pumping capacity is in use, storage capacity of the flow-equalization basins and DSRSD and City of Livermore storage ponds, and required discharge to San Lorenzo Creek are fully utilized, is based on BPJ. The reason that ACWD shall be notified is because ACWD is a downstream water user and responsible for operating

the intake to the areas recharging Niles Cone groundwater designated as a source of drinking water for its service area.

**Prohibition III.D**, no bypass or overflow of untreated wastewater or wastes to surface waters or surface water drainage courses, is based on 40 CFR Sections 122.41(m).

**Prohibition III.E**, the discharge to San Lorenzo Creek shall not exceed 21.5 MGD and shall be limited to flow in excess of available EBDA capacity and the discharge to Alamo Canal shall only occur during a 20-year flow event or greater and shall not exceed 55 MGD, is based on the requested flow in the Dischargers' waste discharge application and the flow projection in Attachment H.

## **B. Technology-Based Effluent Limitations**

1. **Scope and Authority:** The CWA requires that technology-based effluent limitations are established based on several levels of controls. The Federal Water Pollution Control Act Amendments of 1972 (PL 92-500) established the minimum performance requirements for POTWs [defined in Section 304(d)(1)]. Section 301(b)(1)(B) of that Act requires that such treatment works must, as a minimum, meet effluent limitations based on secondary treatment as defined by the USEPA Administrator. Based on this statutory requirement, USEPA developed secondary treatment regulations, which are specified in 40 CFR 133. These technology-based regulations apply to all municipal wastewater treatment plants and identify the minimum level of effluent quality attainable by secondary treatment. Table 4-2 of the Basin Plan includes these minimum levels of secondary treatment expectations.
2. **Applicable Technology-Based Effluent Limitations:** The primary reference for the technology-based effluent limits is Table 4-2 of the Basin Plan. LAVWMA is currently accepting secondary level treated wastewater from DSRSD and the City of Livermore. Both DSRSD and City of Livermore have installed advanced treatment systems, such as micro-filtration (reverse osmosis) and continuously backwashed sand filtration tertiary treatment system, to treat about 13 MGD of their secondary treated effluent to levels of quality good for recycling for uses such as irrigation. However, this permit does not require the quality of the treated wastewater that may need to be discharged during an extreme storm event to be better than the minimum required secondary level of treatment. This permit includes secondary level technology-based effluent limitations for the combined effluent. The basis for other parameters is explained as follows:
  - a. In order to be consistent with the Federal and Basin Plan Table 4-2 limitations, in addition to the maximum daily limits of 60 mg/l for TSS and 50 mg/L for CBOD, the average weekly limits for both TSS and CBOD were added to the effluent limitation table. No average monthly limits are included in this permit because the discharge duration may not exceed five days. Except for Total Coliform Organisms Maximum Daily limit, the reference for Table 7 effluent limits is Table 4-2 of the Basin Plan. Basin Plan Table 4-2 lists a 240 MPN/100 limit for Total Coliform Organisms. But the Note "e" in this Table allows an exception and Note "2d" states that "the Regional Board may consider establishing less stringent requirements for any discharges during wet weather. A less stringent

limit of 1,000 MPN/100 limit is appropriate because the beneficial uses will not be compromised based on the following facts:

- i. This permit prohibits discharge except during extreme storm events,
  - ii. This permit retains from the previous permit an operational goal requirement of 240 MPN/100 for Total Coliform Organisms during a discharge,
  - iii. Both DSRSD and City of Livermore are unable to comply with the 240 number 100% of the time, and
  - iv. Changing the 240, Total Coliform operational goal requirement, into a limit will force the Dischargers to use additional sodium hypochlorite per year. For example, City of Livermore treatment plant currently utilizes approximately 235,000 gallons of sodium hypochlorite per year. Livermore operations staff estimate that hypochlorite usage would have to be increased by about 30% to ensure compliance with a 240 MPN daily maximum limit. Assuming this limit would only need to be met during the wet season, the increase in hypochlorite usage would equate to about 35,250 gallons per year, or an increase in the total amount of hypochlorite used of 15%. The primary concern of the excess chlorination is the production of 15% more chlorination byproducts, which would surely outweigh the benefits of maintaining a lower total coliform count in the very unlikely probability of a discharge. Two of these chlorination toxics byproducts, Chloroform and Bromoform, are also listed in the California Toxic Rule as priority pollutants.
- b. Since this is an intermittent discharge, "the survival of ... test fish ... of the discharge shall not be less than 70%" requirement is sufficient to quantify any potential acute toxicity. The basis for this requirement is Basin Plan Table 4-4. The basis for using rainbow trout and 96-hour static renewal bioassays is BPJ.

### C. Water Quality-Based Effluent Limitations (WQBELs)

1. **Scope and Authority:** As specified in 40 CFR Section 122.44(d)(1)(i), permits are required to include WQBELs for pollutants (including toxicity) that are or may be discharged at levels that cause, have reasonable potential to cause, or contribute to an excursion above any state water quality standard. The process for determining reasonable potential and calculating WQBELs when necessary is intended to protect the designated uses of the receiving water as specified in the Basin Plan, and achieve applicable water quality objectives and criteria that are contained in other state plans and policies, or water quality criteria contained in the Basin Plan, CTR, and NTR.
2. **Applicable Beneficial Uses and Water Quality Criteria and Objectives:** The applicable beneficial uses are explained in Finding II.H. The applicable water quality criteria and objectives are in the Basin Plan Tables 3-5, 3-6, and 3-7, CTR, and NTR.

### D. Final Effluent Limitations

Except for acute toxicity, this permit includes no WQBELs. This is because:

- a) This discharge has never occurred and, based on Attachment H, no discharge may happen during the term of this permit;
- b) No monitoring data, representing the quality of the combined effluent during an extreme storm event, are available to conduct the SIP reasonable potential analysis; and
- c) The most representative monitoring data does not suggest that the combined effluent poses a threat to water quality.

In case of a discharge, the Dischargers will collect monitoring data that will be used to determine any potential impacts from this discharge. In this case, the permit may be reopened to have the required effluent limitations added to this permit.

## V. RATIONALE FOR RECEIVING WATER LIMITATIONS

**A. Surface Water:** These limitations are based on the narrative/numerical objectives contained in Chapter 3 of the Basin Plan as explained below:

The basis for V.A.1.a is on page 3-3 of the Basin Plan;  
 The basis for V.A.1.b is on page 3-2 of the Basin Plan;  
 The basis for V.A.1.c is on pages 3-3 and 3-4 of the Basin Plan  
 The basis for V.A.1.d is on page 3-3 of the Basin Plan;  
 The basis for V.A.1.e is on pages 3-2, 3-3, and 3-4 of the Basin Plan;  
 The basis for V.A.2.a is on pages 3-3 of the Basin Plan;  
 The basis for V.A.2.b is on pages 3-3 and 3-4 of the Basin Plan and BPJ;  
 The basis for V.A.2.c is on pages 3-3 of the Basin Plan;  
 The basis for V.A.2.d is on pages 3-4 of the Basin Plan; and  
 The basis for V.A.3 is on pages 3-5 of the Basin Plan.

**B. Groundwater:** These limitations are on Page 3-6 of the Basin Plan.

## VI. RATIONALE FOR MONITORING AND REPORTING REQUIREMENTS

Section 122.48 of 40 CFR requires all NPDES permits to specify recording and reporting of monitoring results. Sections 13267 and 13383 of the California Water Code authorize the Water Boards to require technical and monitoring reports. The Monitoring and Reporting Program, Attachment E of this Order, establishes monitoring and reporting requirements to implement federal and state requirements. The following provides the rationale for the monitoring and reporting requirements contained in the Monitoring and Reporting Program for this facility.

### A. Effluent Monitoring

**Table F-3. Basis for Effluent Monitoring**

Parameter	Basis
Carbonaceous Biochemical Oxygen Demand 5-day @ 20°C, Total Suspended Solids, Total Chlorine Residual, Total Coliform Organisms, pH, Oil and Grease, Flow, and Volume of treated wastewater stored in flow equalization reservoirs and storage ponds	Needed for Compliance Determination and Documentation
Total Solids	For Reasonable Potential Analysis and August 6, 2001, 13267 Letter Requirement for

Parameter	Basis
	Monitoring of Pollutants in Effluent and Receiving Water to Implement New Statewide Regulations and Policy (Hereinafter 13267 Letter Requirement) requires Total Solids monitoring to be conducted at the same time as monitoring for dioxins and furans, and PCBs (PCBs was detected in DSRSD effluent sample(s) exceeding the water quality objective)
Total Dissolved Solids and Nitrate (NO <sub>3</sub> )	Pollutants listed in Basin Plan Tables 3-5, 3-6, and 3-7
Temperature, Total Ammonia, and Un-ionized Ammonia	Pollutants listed in Basin Plan Page 3-4
NO <sub>3</sub> plus NH <sub>4</sub>	Pollutants listed in Basin Plan Table 3-6
Nitrite (NO <sub>2</sub> ) and Nitrate (NO <sub>3</sub> ) plus Nitrite (NO <sub>2</sub> )	Pollutants listed in Basin Plan Tables 3-5 and 3-6
Copper, Lead, Mercury, Silver, Zinc, Cyanide, TCDD TEQ, Bis(2-ethylhexyl) Phthalate, Aldrin,	For reasonable potential analysis of a pollutant listed with water quality objective in CTR and detected in DSRSD and City of Livermore effluent sample(s) exceeding the water quality objective
Nickel, Selenium, Chlorodibromo-methane, and Dichlorobromo-methane	For reasonable potential analysis of a pollutant listed with water quality objective in CTR and detected in City of Livermore effluent sample(s) exceeding the water quality objective
Chrysene, Alpha-BHC, Beta-BHC, Gamma-BHC, Chlordane, Dieldrin, and Total PCBs	For reasonable potential analysis of a pollutant listed with water quality objective in CTR and detected in DSRSD effluent sample(s) exceeding the water quality objective
Tributyltin, Chlorpyrifos, and Asbestos	13267 Letter Requirement
Diazinon	13267 Letter Requirement, 303d list pollutant for both receiving waters
DDT, furan compounds, PCBs (dioxin like)	Other 303d list pollutants

## B. Receiving Water Monitoring

The basis for requiring only standard observations is the fact that no discharge has occurred yet and the Dischargers may find no need to discharge during the term of this permit.

## VII. RATIONALE FOR PROVISIONS

### A. Standard Provisions

Standard Provisions, which in accordance with 40 CFR Sections 122.41 and 122.42, apply to all NPDES discharges and must be included in every NPDES permit, are provided in Attachment D to the Order.

Title 40 CFR Section 122.41(a)(1) and (b) through (n) establish conditions that apply to all state-issued NPDES permits. These conditions must be incorporated into the permits either expressly or by reference. If incorporated by reference, a specific citation to the regulations must be included in the Order. 40 CFR Section 123.25(a)(12) allows the State to omit or modify conditions to impose more stringent requirements. In accordance with Section 123.25, this Order omits federal conditions that address enforcement authority specified in 40 CFR Sections 122.41(j)(5) and (k)(2) because the enforcement authority under the CWC is more stringent. In lieu of these conditions, this Order incorporates by reference CWC section 13387(e).

### B. Basis for Special Provisions B.1 through B.2

1. The Basis for "Reopener Provisions" is 40CFR123 and BPJ.
2. The rational for requiring this technical report is explained as follows:
  - a. The reason that the monitoring data shall be summarized and, as needed, additional monitoring proposed is because this discharge may adversely impact the beneficial uses.



- b. "Future wet-weather flow projection data" are needed to update the projection in the Attachment H;
  - c. Detailed information on facility (i.e. LAVWMA's daily discharge rate to EBDA's pipe, as well as LAVWMA's 18 MG flow equalization reservoirs and DSRSD and City of Livermore storage ponds capacity utilization data for 30 days prior to discharge and until discharge ceases) would enable the Regional Water Board to determine if the procedures documented in Section II.B on Page 2 of this Fact Sheet were fully followed;
  - d. In case of a discharge or spill, the Dischargers shall focus on additional preventive measures for reducing the risk of future discharges. These preventive measures shall be added to LAVWMA's Operation and Maintenance Manual; and
  - e. Documenting "rate and extent of the groundwater recharge..." would quantify the level of protection needed for groundwater beneficial uses.
3. This requirement is repeated from the existing permit to prevent discharges that are avoidable and is based on BPJ.

## **VIII. PUBLIC PARTICIPATION**

The California Regional Water Quality Control Board, San Francisco Bay Region (Regional Water Board) is considering the reissuance of waste discharge requirements (WDRs) that will serve as a National Pollutant Discharge Elimination System (NPDES) permit for the Livermore-Amador Valley Water Management Agency export, storage facilities, and San Lorenzo Creek and Alamo Canal dechlorination facilities, and DSRSD and City of Livermore storage facilities. As a step in the WDR adoption process, the Regional Water Board staff has developed tentative WDRs. The Regional Water Board encourages public participation in the WDR adoption process.

### **A. Notification of Interested Parties**

The Regional Water Board has notified the Dischargers and interested agencies and persons of its intent to prescribe waste discharge requirements for the discharge and has provided them with an opportunity to submit their written comments and recommendations. Notification was provided through a legal notice published in Valley Times newspaper.

### **B. Written Comments**

The staff determinations are tentative. Interested persons are invited to submit written comments concerning these tentative WDRs. Comments should be submitted either in person or by mail to the Executive Office at the Regional Water Board at the address above on the cover page of this Order.

To be fully responded to by staff and considered by the Regional Water Board, written comments should be received at the Regional Water Board offices by 5:00 p.m. on March 16, 2006.

### **C. Public Hearing**

The Regional Water Board will hold a public hearing on the tentative WDRs during its regular Board meeting on the following date and time and at the following location:

Date: April 12, 2006  
Time: 9:00 AM  
Location: Elihu Harris State Building (1st Floor auditorium)  
1515 Clay Street  
(walking distance from City Center 12<sup>th</sup> Street BART station)  
Oakland, CA 94612

Interested persons are invited to attend. At the public hearing, the Regional Water Board will hear testimony, if any, pertinent to the discharge, WDRs, and permit. Oral testimony will be heard; however, for accuracy of the record, important testimony should be in writing.

Please be aware that dates and venues may change. Our web address is <http://www.waterboards.ca.gov/sanfranciscobay> where you can access the current agenda for changes in dates and locations.

### **D. Waste Discharge Requirements Petitions**

Any aggrieved person may petition the State Water Resources Control Board to review the decision of the Regional Water Board regarding the final WDRs. The petition must be submitted within 30 days of the Regional Water Board's action to the following address:

State Water Resources Control Board  
Office of Chief Counsel  
P.O. Box 100, 1001 I Street  
Sacramento, CA 95812-0100

### **E. Information and Copying**

The Report of Waste Discharge (RWD), related documents, tentative effluent limitations and special provisions, comments received, and other information are on file and may be inspected at the address above during regular office hours, which are generally weekdays from 8:00 a.m. to 5:00 p.m., excluding 12:00 p.m. to 1:00 p.m. lunch hours and holidays. Copying of documents may be arranged through the Regional Water Board by calling (510) 622-2300.

#### **F. Register of Interested Persons**

Any person interested in being placed on the mailing list for information regarding the WDRs and NPDES permit should contact the Regional Water Board, reference this facility, and provide a name, address, and phone number.

#### **G. Additional Information**

Requests for additional information or questions regarding this order should be directed to **Farhad Azimzadeh at (510) 622-2310 or by e-mail at [fazimzadeh@waterboards.ca.gov](mailto:fazimzadeh@waterboards.ca.gov)**.

**ATTACHMENT G - AUGUST 1993 STANDARD PROVISIONS, MONITORING AND REPORTING REQUIREMENTS FOR NPDES WASTEWATER DISCHARGE PERMITS**

Attachment G is not attached due to volume. But it is available by contacting the Regional Water Board, or may be downloaded at  
[www.waterboards.ca.gov/sanfranciscobay/Download.htm](http://www.waterboards.ca.gov/sanfranciscobay/Download.htm)

**ATTACHMENT H - AUGUST 1993 SELF-MONITORING PROGRAM PART A FOR  
NPDES PERMITS**

Attachment H is not attached due to volume. But it is available by contacting the Regional Water Board, or may be downloaded at  
[www.waterboards.ca.gov/sanfranciscobay/Download.htm](http://www.waterboards.ca.gov/sanfranciscobay/Download.htm)

## ATTACHMENT I – FLOW PROJECTION



Los Angeles  
Sacramento  
San Francisco  
San Jose  
Walnut Creek

December 13, 2005

Mr. Farhad Azimzadeh  
1515 Clay Street  
Oakland, CA 94612

**Subject: Estimated Volume of Potential LAVWMA Overflow to Alamo Canal**

Dear Mr. Azimzadeh:

As you requested, this letter discusses the estimated volume of potential emergency discharge from LAVWMA facilities to Alamo Canal, as related to the renewal of Order No. 99-023.

Potential overflow volumes to Alamo Canal were estimated and reported in the Wet Weather Operations Model, Phase III (Model) report (Carollo Engineers, 1998). This model simulated future wet weather flows by integrating projected growth with 67 years of historical rainfall data. The flow results were then analyzed statistically, to estimate the volume of overflow that would occur for a 5-year, 10-year, and 20-year flow event. Model results were included in Figure 2-13 of the Environmental Impact Report for the Export Pipeline Facilities Project (EIR) (Environmental Science Associates, 1998).

The Model estimated that the expanded LAVWMA system would provide 20-year flow event peak wet weather flow capacity until approximately 2023, presuming groundwater injection of water treated by reverse osmosis (RO) by member agencies. Figure 2-13 of the EIR illustrates this information more clearly. Figure 2-13, which is included as an attachment to this letter, assumed completion of the LAVWMA system expansion in 2003. In actuality, LAVWMA did not have full expanded capacity until 2005. After adjusting Figure 2-13 for this delayed completion date, one can conclude that between 2005 and approximately 2023, LAVWMA expects to have **no** overflows to Alamo Canal in a 20-year flow event or less. Between 2023 and 2040, LAVWMA expects to have overflows in 5-year, 10-year, and 20-year flow events, with an estimated maximum expected total annual overflow of 55 million gallons in 2025, increasing to 100 million gallons in 2040, for the 20-year flow event.

LAVWMA is required to update the Model every five years, beginning in 2006, in conjunction with permit renewal. Therefore, the 1998 Model, and results described above, are the most current results available, and accurately reflect expected overflows from the LAVWMA facilities to Alamo Canal.

Please call me at (925) 627-4111 if you have questions or would like to discuss this matter further.

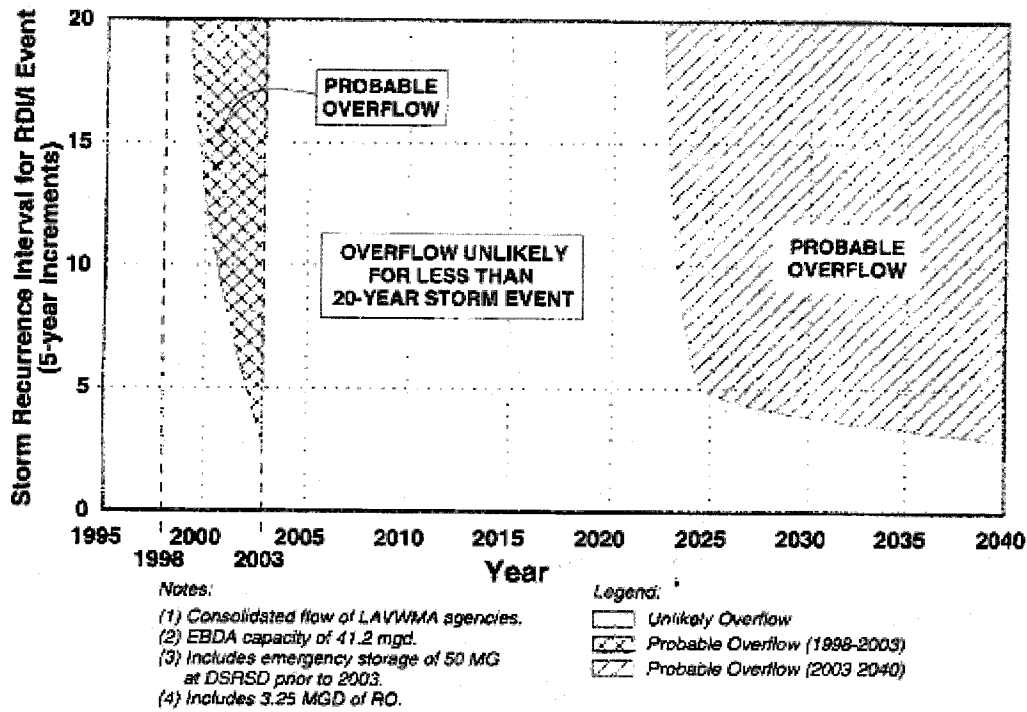
Sincerely,

A handwritten signature in dark ink, appearing to read "V. Housen", is written over a horizontal line.

Vivian Housen, P.E.  
Senior Project Manager

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Walnut Creek, CA 94596  
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www.rmcwater.com

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Year	Expected Frequency	Overflow Event (Total Wet Season)			
		Expected Volumes (MG)			
		1 Yr. Event	5 Yr. Event	10 Yr. Event	20 Yr. Event
1998	>20 year	0	0	00	0
2002	3-5 year	0	30	60	95
2003	<b>LAVWMA Export Pipeline Project Operational</b>				
2003	>70 year	0	0	0	0
2010	>70 year	0	0	0	0
2020	>70 year	0	0	0	0
2025	3-5 year	0	5	25	55
2035	3-5 year	0	15	50	90
2040	3-5 year	0	30	55	100

SOURCE: Camille Engineers

LAVWMA Export Pipeline Facilities Project EIR / 970331 ■

**Figure 2-13**  
Risk of Wet Weather Overflow